Opportunity for JLABS and the VA
Overview for Discussion

June 2019

Purpose of Deck

- Follow-up to meeting at JLABS @ NY on June 17, 2019 with JLABS, representatives from various J&J sectors and the VA which focused on the cross-section between JLABS/J&J areas of expertise and VA areas of need

- In particular, JLABS and VA discussed JLABS capabilities and potential areas for future collaboration. This deck captures the different possibilities related to future collaboration to address mutual areas of interest so that the VA may determine possible arrangements and best paths to proceed

JLABS and VA Collaboration in DC

Johnson & Johnson InnoVAtion - JLABS (JLABS) and the Department of **Veterans Affairs (VA)** aim to to utilize their mutual expertise and resources towards the aligned goal of finding and supporting innovative solutions of common interest. The strategic areas of interest include:

- mental health
- women's health, and
- nursing inspired solutions

The currently contemplated partnership is anticipated to be launched Veterans Day, 2019 and seeks to leverage JLABS @ Washington, DC to with a goal of announcing the kick off "A Year of Innovation at the VA".

Partnership goals include (1) 3 QuickFire Challenges during 2019-2020 that will highlight these priority areas of interest and (2) utilization JLABS @ DC to anchor a [(b) (4)]

[(b) (4)]

- **Series of QuickFire Challenges** focused on strategic areas of interest with the aim of exciting a global innovation ecosystem and identifying high potential innovation

- [(b) (4)]

- [(b) (4)]

QuickFire Challenges
A Year of Innovation at the VA

Mental Health

Proposed Focused Areas: suicide prevention, depression, postmenopausal depression, combating loneliness, etc.
Award: $100,000 provided by VA
Launch: Veteran's Day 2019, at public announcement of the collaboration
Winner Announcement: May 2020 during Mental Health Awareness Month

Women's Health

Proposed Focused Areas: TBD in collaboration with J&J
Award: $100,000 provided by VA/J&J
Launch: Feb - March 2020
Winner Announcement: September 2020

VA Nursing Innovation

Proposed Focused Areas: Current or retired VA nurses
Award: $100,000 provided by VA/J&J
Launch: National Nurses Week beginning of May 2020
Winner Announcement: Veteran's Day 2020

*dates subject to change based on amplification opportunities, conferences, etc.

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Key Dates

- Definition and Planning
  - VA provide feedback on collaboration elements and framework | July 8
  - Develop and finalize budget | July 30
  - Finalize timelines | July 30

- Engagement
  - VA to identify available contracting mechanisms | July 12
  - Agreement(s) executed | Sept 30

- Announcement
  - Finalize announcement event plan | August 30
  - Finalize press release | October 31

Roadmap & Key Milestones to Launch

Phases/Milestones	Q2 FY19	Q3 FY19			Q4 FY19		
	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Definition & Planning
Identify collaboration elements and framework
Finalize timelines
Finalize topics and focus areas
Develop budgets

Engagement
Identify available contract mechanisms
Negotiate agreements
Finalize signatures

Announcement
Develop announcement event plan
Finalize speaker invitations
Draft and finalize press release

(b) (4)

Back Up Slides

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QuickFire Challenges

Johnson & Johnson Innovation - JLABS leverages the
QuickFire Challenge (herein referred to as "QFC") as a platform
to inspire the best science and technology to solve the biggest
healthcare challenges of our time. This crowdsourcing platform
seeks to empower and enable groundbreaking science
and health solutions by encouraging students, entrepreneurs,
researchers, and start-up companies to apply.

QUICKFIRE STAGES

*JLABS deploys each challenge through the process
outlined here:*

(b) (4)

(b) (4)

To date, JLABS has launched:

(b) (4)

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Introduction

- JLABS works with a variety of companies within its portfolio that fit the stated VA Areas of Interest ("AOI", *e.g.*, telemedicine, mental health and woman's health)

- The profiles contained in this deck have been selected to provide examples of companies performing unique or interesting work in the AOIs; these profiles (and other JLABS portfolio company information) are publicly available for review at https://jlabs.jnjinnovation.com/companies

- For additional information on any of the companies profiled herein, please feel free to reach out to Erika Kula @ ekula@its.jnj.com

JLABS Mental Health Focused Companies

App4 Independence

PRIMARY SECTOR/TA/INDICATION:	Medical Devices | Health Tech
SECONDARY SECTOR/TA/INDICATION:	Pharmaceuticals | Neuroscience | Schizophrenia
RESIDENT STATUS LOCATION:	Toronto
RESIDENT STATUS:	Current
R&D STAGE:	Pre-Clinical / Early Mechanical

KEY DIFFERENTIATION:

Digital platform that allows for real time assessment of cognitive function in psychiatric disorders

QuickFire Challenge

MISSION STATEMENT:

A Joint Venture between CAMH and MEMOTEXT, A4i aims to solve many of the current problems across the schizophrenia healthcare continuum. An evidence-based, peer-to-peer patient centric mobile app and provider portal, A4i enhances both illness self-management and provider engagement to better support recovery, medication adherence and community functioning while predicting and attempting to reduce relapse risk for people living with schizophrenia and psychosis.

PROBLEM:

Schizophrenia occupies 1 out of 12 hospital beds in Canada, costing $6.85B annually in healthcare costs and effective services are hampered by several complex, compounding factors. Currently there are no commercially available and/or clinically proven digital or mobile health offerings that provide a solution to improve medication adherence in patients with schizophrenia. With a 70% mobile tech adoption among patients, A4i is a response to the gaps in the current system of care for individual s with schizophrenia-spectrum illnesses.

SOLUTION:

Our technology is unique in that it is designed with clinical expertise of a leading mental health institution and the expertise of a digital health commercialization innovation team. Behind this team is a robust and proprietary technology with clinically specific IP and significant market access both through commercial and clinical collaborative opportunities. The IP will relate to the clinical decision rules used by the system to determine content distribution and interpretation of ambient and subjective health data. A4i combines multiple frameworks (social activation, stress, anxiety, motivation and cognition) to dynamically engage, collect data, tailor and deliver (anonymized) peer-to-peer and evidence-based content. A4i uses interactions, usage and ambient sleep monitoring, pioneering the use of machine learning and hypothesis-driven content feed and data analysis to combine subjective and objective data elements to segment intervention content in real-time. These key functions of A4i are tailored to the specific needs and preferences of individual users. They were developed from a rigorous process of iterative and incremental development that involved reviews of the academic literature and building from proven e-health strategies. Most importantly, active participation of end-users and key stakeholders engaged as advisors throughout the course of iterative testing. The system which will be accessible both with smart (iOS/Android) and feature (non-smart/flip phones) will be unique in its ability to adapt the intervention to the specific needs and behaviors of the patient/user.

Blackthorn Therapeutics

BlackThorn THERAPEUTICS

www.blackthornrx.com

PRIMARY SECTOR/TA/INDICATION:	Pharmaceuticals | Neuroscience | Mood Disorders
RESIDENT STATUS LOCATION:	Bay Area – SSF
RESIDENT STATUS:	Alumni
R&D STAGE:	Phase 2a

KEY DIFFERENTIATION:

Blackthorn uses a stronger data science approach for their clinical trials creating and utilizing new endpoints. They are working in these areas because they want to remove some of the subjectivity that is found in neurological clinical testing and treatment.

MISSION STATEMENT:

BlackThorn Therapeutics mission is to develop breakthrough medicines for patients with neurodevelopmental disorders with circuit dysfunction as a cause of the disorder.

PROBLEM:

Historically the approach to the discovery and development of neurobehavioral therapeutics has been grounded in categorical diagnoses (DSM) and subjective tools. This approach has resulted in limited success in bringing new treatments to the field. BlackThorn's philosophy is that by taking a circuit and physiologic based approach to neurobehavioral disorders that significant improvement can be made in developing novel CNS therapeutics. The company's approach is grounded in linking targets known to regulate neural circuits, which underlie dysregulated behaviors such as anhedonia, impulsivity or poor reward recognition, schizophrenia, and ASD. By drugging validated targets known to regulate specific behaviors the company believes that substantial improvement can be made in treating neurobehavioral disorders.

SOLUTION:

BlackThorn's circuit-based approach to neurobehavioral disorders is deep supported by advancements in technology and data science providing unique understanding and insights of the core underlying pathophysiology of neurobehavioral disorders. To address the historical challenges in neurobehavioral clinical development, such as subjectivity, patient heterogeneity and high placebo response rates, BlackThorn is leading the way in integrating novel technologies such as digital and vocal biomarkers into the clinical development process. Applying these technologies when integrated with data science insights provides BlackThorn with an ability to understand neurobehavioral disorders as never before. The result of these unique insights is hypothesized to be smaller trials, targeted to the right patients and with a higher probability of success. BlackThorn's vision is that this differentiated approach to neurobehavioral disorders will allow patients in the future to be quickly and accurately diagnosed with matched with effective and targeted treatments.

Eikonizo Therapeutics

Eikonizo Therapeutics

PRIMARY SECTOR/TA/INDICATION:	Pharmaceuticals | CNS/Neurology, Gerontology/Aging | Alzheimer's Disease
RESIDENT STATUS LOCATION:	Boston – LabCentral
RESIDENT STATUS:	Current
R&D STAGE:	Discovery (Research, TI/TV)

KEY DIFFERENTIATION:

Have proprietary PET imaging technology to be used in combination with drug discovery efforts which will enable better target engagement and dose determination.

MISSION STATEMENT:

To catalyze development of life-changing therapies by deploying rapid in vivo target engagement techniques and accelerating identification of lead drug candidates, particularly for brain diseases.

PROBLEM:

A disease-modifying treatment does not exist for Alzheimer's disease (AD) or the related neurodegenerative disease, amyotrophic lateral sclerosis (ALS).

SOLUTION:

There is a fundamental flaw in the approach of all drug candidates for AD or ALS investigated to date: a focus on single mechanistic drivers of disease. This, coupled with poor utilization of modern target engagement tools (e.g. known and novel PET radiotracers), has resulted in a patient population desperate for an evolution in medicine. Our technology leverages a novel radiotracer tool and expertise in chemistry to explore HDAC6 inhibition as a strategy to attack multiple disease related pathways underlying neurodegenerative diseases, starting with AD and ALS.

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Holmusk

holmusk

PRIMARY SECTOR/TA/INDICATION:	Pharmaceuticals	Neuroscience	Data analysis
SECONDARY SECTOR/TA/INDICATION:	Pharmaceuticals	Health Tech
RESIDENT STATUS LOCATION:	NYC
RESIDENT STATUS:	Current
R&D STAGE:	Discovery (Research, TI/TV)

KEY DIFFERENTIATION:

End to end collation of mental health data between patients and physicians enabling a holistic view of the patient experience enabling better clinical decision making.

MISSION STATEMENT:

To use technology to enhance data-enabled, human-driven healthcare and improve the lives of people with chronic and behavioural health.

PROBLEM:

Behavioral health patients are underserved. Solutions to behavioral health, mental health and neuropsychiatric diseases are limited, with the practice of clinical care and the rate of investment in research and development of new drug treatments unable to keep up with the intensity of the problem.

SOLUTION:

Holmusk, through the capture, organizing and analytics of patient behavioral health data, is building a next generation behavioral health platform to enable the delivery of quality care for patients suffering from mental health disorders. This platform incorporates a behavioral health specific electronic health record system (MindLinc 2.0), combined with a digital health platform (HealthLinc) gathering digital phenotype data outside of clinician visits to create the largest longitudinal real-world behavioural health database (Holmusk Database). Holmusk's proprietary algorithms (Holmusk Analytics) stitch together these two types of data, processing & translating them into a continuous disease trajectory for individual patients. This brings an unprecedented understanding of patient mental health, allowing pharma companies, clinicians and researchers to investigate needs of patients and design new therapeutics, drugs and interventions which can be tested readily on a network of community mental health clinics.

Holobiome

PRIMARY SECTOR/TA/INDICATION:	Pharmaceuticals	Microbiome
SECONDARY SECTOR/TA/INDICATION:	Pharmaceuticals	Neuroscience	Mood Disorders
RESIDENT STATUS LOCATION:	Boston – LabCentral
RESIDENT STATUS:	Current
R&D STAGE:	Preclinical (GLP Tox-IND)

KEY DIFFERENTIATION:

Pathway and disease specific use of microbiome as a clinical intervention with neuromodulator evaluation.

MISSION STATEMENT:

Our mission at Holobiome is to treat and prevent disease by manipulating the human microbiome. Our early focus is around treating diseases related to the nervous system, including sleep discorders, treatment-resistant depression, and irritable bowel syndrome. We seek to build portfolio and infrastructure value as we develop therapeutics (in the form of OTC probiotics and/or biologics) for these initial indications. This will enable rapid expansion into other therapeutic areas.

PROBLEM:

Up to 30% of the global population suffers from sleep issues, and this comes with a substantially increased risk of metabolic and cardiovascular disease, as well as behavioral disorders. Depression, recently classified as the leading cause of disability worldwide by the World Health Organization, affects up to 9% of adults in the U.S. per year, and an estimated 20% of the population will experience a depressive episode in their lifespan. IBS is characterized by chronic abdominal pain and discomfort, and is estimated to effect between 10 and 20% of the U.S. population. Unfortunately, a major problem with treating these disorders is the lack of efficacy of front line drugs, or lack of therapeutic options. For example, 29 – 46% of patients with depression do not see resolution or improvement of symptoms after front-line treatment, which are typically serotonin reuptake inhibitors. However, it was withdrawn due to an increased risk of adverse cardiovascular events. For sleep disorders, while several drugs exist today – such as eszopiclone (Lunesta) or zolpidem (Ambien) – many come with a high risk of addiction and a negative stigma. This is a likely reason why many individuals suffering from sleep disorders do not seek treatment (<20%). Due to limited or poor therapeutic options for sleep disorders, treatment resistant depression, and IBS, these diseases impose an enormous socioeconomic burden on society and the affected individual, with an estimated annual global cost of over one trillion dollars. We seek to fix this, providing health solutions to those in need.
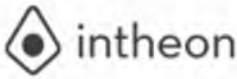
SOLUTION:

The lead products of Holobiome consist of bacteria able to alter host GABAergic and Serotonergic neurotransmission. Incredibly, intervention with these neurotransmitter modulating bacteria has been shown to provide antidepressant, anxiolytics, and improved intestinal motility phenotypes, multiple animal models, and microbiome intervention in humans can alter levels of these important nearutransmitters or their prescursons. Providing these bacteria to patients will provide therapeutic efficacy in our target indications via stimulation of the enteric and peripheral nervous system locally and/or to the central nervous system via the vagus nerve. A key feature of our products are there strong safety profiles. Many existing drugs for our target indications have considerable side effects, such as weight gain, sexual dysfunction, and addiction. Microbiome-based therapeutics, consisting of naturally occurring microbes that exist in healthy humans, are expected to be exceptionally safe with minimal side effects. This inherent safety will minimize regulatory costs and hurdles, while expediting the developmental timeline compared to traditional drugs. For the probiotic path, the fact these strains have evolved with and exist in humans reinforces their safety profiles, and has been received well by the FDA for generally regarded as safe (GRAS) notification submissions.

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Intheon (fka Syntrogi)

![intheon]

http://www.intheon.io/

PRIMARY SECTOR/TA/INDICATION:	Medical Devices | Health Tech
SECONDARY SECTOR/TA/INDICATION:	Medical Devices | Diagnostics
RESIDENT STATUS LOCATION:	San Diego – JRD
RESIDENT STATUS:	Alumni
R&D STAGE:	Pre-Clinical / Early Mechanical

KEY DIFFERENTIATION:

Intheon is pioneering the world's first neurotechnology middleware platform, powering transformative applications that connect to your mind and body – anytime.

MISSION STATEMENT:

Intheon's mission is to power the coming neurotechnology revolution by enabling turnkey integration of advanced brain & body state assessment into any application or device – anytime, anywhere.

PROBLEM:

Rapidly accelerating advances in fundamental and applied neuroscience, machine learning and AI, and physiological sensing and computing have created tremendous potential for neurotechnology to transformatively impact many facets of everyday life, including health, medicine, and wellness; human performance and ergonomics, and more. However, R&D and software infrastructure involved in developing and deploying advanced neurotechnology solutions are typically expensive, time-consuming, and requires rare expertise.

SOLUTION:

We empower businesses to surmount R&D and deployment challenges, while reducing cost and time-to-market, for their neurotechnology-related products through the first scalable "plug and play" Platform as a Service for brain & body state assessment. Our cloud middleware service, NeuroScale™, provides "anytime, anywhere" access to state-of-the-art real time and batch processing of neuronal and other physiological signals, from diverse non-invasive (+wearables) and invasive sensor hardware, through an easy-to-use API and our turnkey pipelines. Detailed analyses of individual datasets or large studies can be quickly summarized into meaningful digests through our automated NeuroScale™ Reports service. Additionally, our NeuroPype™ Enterprise desktop application suite allows researchers and developers to easily design, develop, and trial their own specialized biosignal processing pipelines, with one-click deployment to our cloud service or on-premise execution.

By enabling businesses to quickly build on advanced R&D and established infrastructure, we aim to catalyze growth, accessibility, and impact of transformative neurotechnology solutions .

Mindpax

Mindpax.me

https://mindpax.me/en/

PRIMARY SECTOR/TA/INDICATION:	Medical Devices	Health Tech
SECONDARY SECTOR/TA/INDICATION:	Pharmaceuticals	Neuroscience	Mood Disorders
RESIDENT STATUS LOCATION:	Beerse
RESIDENT STATUS:	Current
R&D STAGE:	Full Product Development

KEY DIFFERENTIATION:

The Mindpax system for collecting and analyzing data is both simple to use and works independently of hardware platforms. The Mindpax monitoring system helps to monitor biorhythms, to give insights into physical and mental wellbeing and predict mental health attacks before they happen.

MISSION STATEMENT:

We aim to become leader in digital therapy for patients suffering from the most severe mental health diseases of schizophrenia and bipolar disorder.

PROBLEM:

High costs of mental health treatment, low quality of life of psychiatric patients, no long-term information on disease development for doctors

SOLUTION:

Focus on long-term monitoring of circadian rhythms as a proxy for digital biomarker predicting relapse of severe mental health diseases.

NeuroTheryX

www.neurotheryx.com

PRIMARY SECTOR/TA/INDICATION:	Pharmaceuticals	Neuroscience	Mood Disorders
SECONDARY SECTOR/TA/INDICATION:	Pharmaceuticals	Platform	Therapeutic
RESIDENT STATUS LOCATION:	Toronto
RESIDENT STATUS:	Current
R&D STAGE:	Lead (H2L-LO)

KEY DIFFERENTIATION:

In vivo expression system provides opportunity to screen and rapidly identify drugs for treatment of neurodegenerative models.
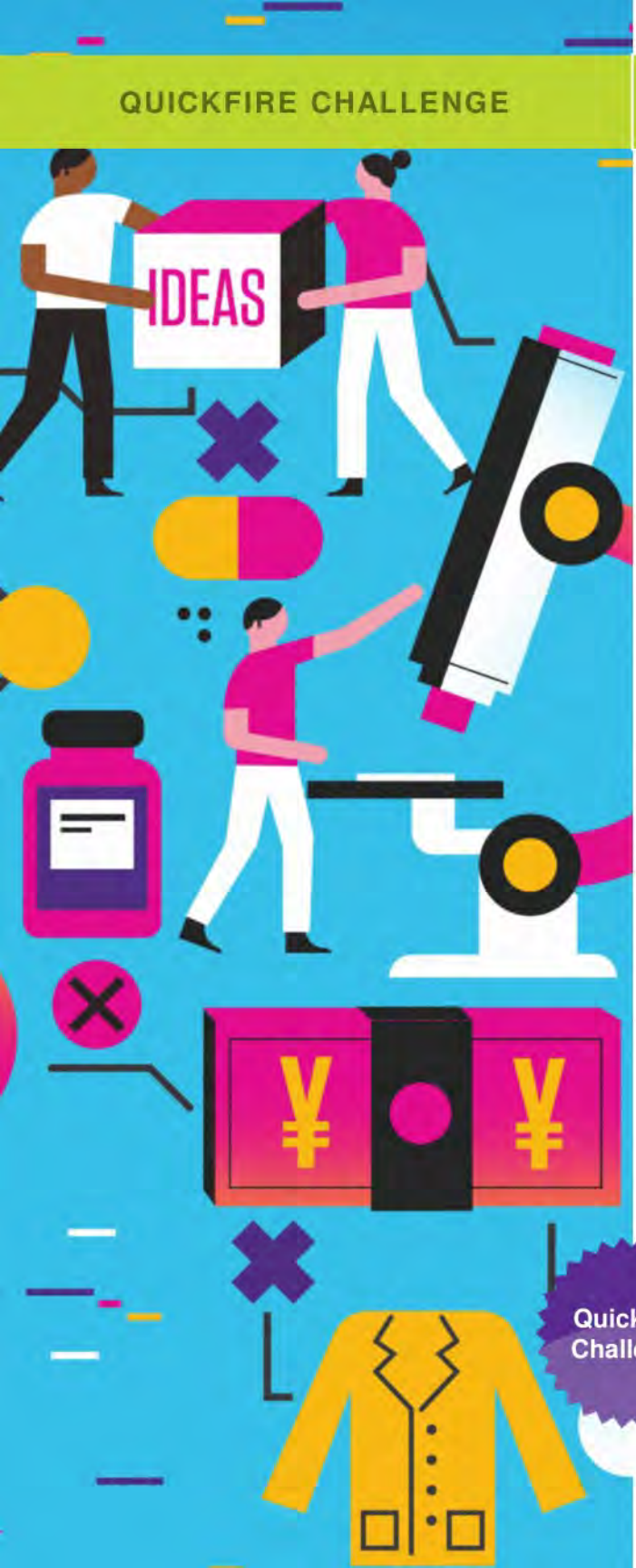
MISSION STATEMENT:

NeuroTheryX is an R&D-driven development stage drug discovery company focusing on CNS diseases. NeuroTheryX utilizes a discovery platform defined by highly predictive and efficient biology-driven models with a focused and prioritized chemistry approach. NeuroTheryX has extensive biological disease models that can be screened with both small molecules as well as biological extracts. The NeuroTheryX lead drug is a small molecule therapeutic for the treatment of progressive multiple sclerosis. NeuroTheryX also has interest in the area of neuropsychiatric disorders such as bipolar disorder

PROBLEM:

NeurotheryX is bringing a novel biological approach to drug discovery which has been neglected. Specifically, NeurotheryX focuses on CNS diseases. Our main project addresses the un-met need for therapeutics aimed at myelin repair in demyelinating conditions.

SOLUTION:

A unique biology driven technology platform combined with focused chemistry allows NeurotheryX to generate powerful intellectual property protected new chemical entity therapeutics that have been extensively de-risked.

Neurotrack

Neurotrack

www.neurotrack.com

PRIMARY SECTOR/TA/INDICATION:	Consumer | Health Tech | Sensors
SECONDARY SECTOR/TA/INDICATION:	Pharmaceuticals | Neuroscience | Alzheimer's Disease
RESIDENT STATUS LOCATION:	Virtual
RESIDENT STATUS:	Current
R&D STAGE:	Pre Revenue/Commercial

KEY DIFFERENTIATION:

At Neurotrack, our neuroscientists, neuropsychologists and engineers have developed the Imprint Memory Assessment based on breakthrough research. Taken online, the assessment offers advanced eye tracking technology in the comfort and privacy of an individuals own home and allows recurring assessment to show and predict decline over time.

MISSION STATEMENT:

Silicon-Valley-based Neurotrack, led by Elli Kaplan, CEO, is on a mission to transform the diagnosis and prevention of memory loss and related diseases like Alzheimer's.

PROBLEM:

Alzheimer's disease is the greatest healthcare challenge of our generation. Its insidious and debilitating nature takes an enormous toll on the quality of life of those who suffer from the disease as well as their family members and caretakers.

SOLUTION:

Neurotrack is commercializing the first fully integrated digital platform for assessing and preventing cognitive decline and Alzheimer's disease. Neurotrack's digital therapeutic is validated to delay Alzheimer's and improve cognition. The companion Imprint 30-min assessment can assess an individual's risk for cognitive decline and the 5-minute Imprint Monitor is used to engage and monitor patients while on the digital therapeutic. The platform is available on desktop and mobile.

QuickFire Challenge

Pentavere Research Group

PRIMARY SECTOR/TA/INDICATION:	Consumer | Health Tech | Data Mining
RESIDENT STATUS LOCATION:	Toronto
RESIDENT STATUS:	Current
R&D STAGE:	Various

KEY DIFFERENTIATION:

Company has demonstrated that their tool can take unstructured data and turn it into structured data.

MISSION STATEMENT:

To improve health outcomes by uncovering knowledge hidden within unstructured health data.

PROBLEM:

Despite drowning in data, 80% of the health information we create is still buried in clinical narrative documentation. Today the only way to aggregate and extract real world evidence from these unstructured clinical sources is by manual chart abstraction which is time consuming, cost prohibitive, and does not scale.

The result is that critical information is lost, innovative projects go un-started and medical error death rates continue to increase despite the technological advances in medical treatment.

SOLUTION:

Pentavere has developed technology, clinically validated, which transforms unstructured clinical narrative sources into high quality "row and column" data sets in a fraction of the time and with more precision than manual chart abstraction. These data sets are then used for diagnosis analytics, predictive applications, and precision medicine. The value of delivering datasets that provide truly meaningful insights without having to incur the costs, time delays, and inaccuracies of manual abstraction is significant in reducing the inadequate medical information problem that continues to be a leading cause of death in North America.

Redpin Therapeutics

REDPIN
therapeutics

PRIMARY SECTOR/TA/INDICATION:	Pharmaceuticals	Neuroscience	Parkinson's Disease
RESIDENT STATUS LOCATION:	NYC
RESIDENT STATUS:	Current
R&D STAGE:	Preclinical (GLP Tox-IND)

KEY DIFFERENTIATION:

Redpin has two mechanisms to activate the modified receptors which would enable therapeutic benefit, no other company has access to this technology. The technology can be applied to various disease states.

MISSION STATEMENT:

RedPin seeks to develop and commercialize two novel and complementary platform technologies that enable the non-invasive regulation of cell activity using engineered receptors that are controlled by one of two methods: an FDA-approved drug (chemogenetics) or a magnetic field (magnetogenetics). We aim to treat both neurological and psychiatric disorders that do not respond to current therapies.

PROBLEM:

Today's drugs that modulate cell activity usually do so by systemic drug adminitration that leads to pharmacological effects across multiple regions and cell types. This untargeted approach may be associated with side effects that may limit efficacy.

SOLUTION:

Our chemogenetic and magnetogenetic technologies turn drug development on its head. Instead of the costly and slow traditional approach, which painstakingly develops a different drug for each receptor associated with a particular disease, Redpin has a scalable, generalizable solution that is applicable to many different diseases. We have developed engineered receptors that can be activated by a safe, potent, FDA-approved drug or magnetic fields to obtain pharmacological control over any cell type. Using different engineered receptors, the activated response can be either inhibitory or stimulatory to individual cells or neuronal circuits. The power of this unique technology is that it can be used to treat currently intractable disorders in disparate areas of medicine by targeting specific cells responsible for disease states in neurology, psychiatry, metabolism, and cancer.

Tiatros Inc.

TIATROS

www.tiatros.com

PRIMARY SECTOR/TA/INDICATION:	Consumer	Health Tech	Digital Therapeutics
RESIDENT STATUS LOCATION:	MBC SF
RESIDENT STATUS:	Alumni
R&D STAGE:	Pre Revenue/Commercial

KEY DIFFERENTIATION:

Tiatros has tested their digital health program in collaboration with the VA on soldiers with PTSD.

MISSION STATEMENT:

Tiatros provides resilience skills training programs and analytic tools that enable Human Resources and Employee Benefit groups to actively manage the productivity, mental health and psychological resilience of their workforce.

PROBLEM:

Large self-insured employers increasingly understand that underspending on mental health results in overspending on physical health. They understand that the key to lowering their corporate healthcare costs is to provide access to effective mental health care. They need affordable, evidenced-based behavioral health and psychological resilience skills services that result in quantitatively measurable improvements to the overall health, productivity and psychological resilience of their entire workforce.

Employers must be part of the solution to this problem, because they bear much of its cost. Collectively, employers lose $200 billion dollars in productivity each year due to untreated mental illness, while spending another $200 billion dollars to treat anxiety and depression in the workforce. That said, lost productivity costs and the direct cost of mental health care are just the tip of the proverbial iceberg for self-insured employers. The largest and most difficult-to-quantify part of their corporate healthcare budgets is spent indirectly on mental illness, i.e., hundreds of billions of dollars of healthcare spending on gastrointestinal illnesses, musculoskeletal illnesses, insomnia, pre-diabetic conditions, heart disease, substance abuse, migraine, and other chronic illnesses that are greatly exacerbated by untreated co-occurring mental illness.

SOLUTION:

Tiatros programs consist of 8 weekly sessions that each take approximately 90 minutes to complete. 12 – 16 participants who have similar health challenges and personal goals form a 'peer group'. Each peer group is moderated by a trained facilitator and overseen by an expert CBT therapist. Participants access their programs asynchronously, from anywhere, on their personal devices, when it is most convenient.

Participants learn and practice CBT skills with the other members of their peer group. We teach evidence-based CBT exercises, including Narrative Therapy and storytelling, journaling, and mindful meditation, that are carefully tailored to resonate with participants. We use social media-styled methods to foster a supportive and nurturing community that is itself therapeutic, acting to encourage every participant to actively engage in and complete his/her program. This approach greatly increases the number of therapeutic touch points, with most participants engaging daily, and some several times per day, so Tiatros achieves 75% program completion rates and clinical outcomes that are as good those seen in psychotherapies conducted by expert psychiatrists at top medical centers.

Tiatros integrates natural language analytics to personalize the user experience and sustain high levels of engagement; improve clinical outcomes; and provide the tools that our customers need to make data driven decisions to manage their budgets to optimize the health and psychological resilience of their workforce.

Winterlight labs

www.winterlightlabs.com

PRIMARY SECTOR/TA/INDICATION:	Pharmaceuticals | Neuroscience | Alzheimer's Disease
SECONDARY SECTOR/TA/INDICATION:	Pharmaceuticals | Health Tech
RESIDENT STATUS LOCATION:	Toronto
RESIDENT STATUS:	Current
R&D STAGE:	Discovery (Research, TI/TV)

KEY DIFFERENTIATION:

Algorithm has demonstrated potential to identify AD from clinical trial data.

MISSION STATEMENT:

To detect and diagnose cognitive and mental health conditions through speech and language using artificial intelligence.

PROBLEM:

Currently neuropsychology assessments are:

1. Time consuming & expensive
2. Subjective
3. Stressful
4. Can't be done often

SOLUTION:

We're the only company that uses speech and language to computationally detect cognitive impairment.

WINTERLIGHT

Aggamin

Aggamin

www.aggamin.com

PRIMARY SECTOR/TA/INDICATION:	Pharmaceuticals	Women's Health
RESIDENT STATUS LOCATION:	NYC
RESIDENT STATUS:	Current
R&D STAGE:	Discovery (Research, TI/TV)

KEY DIFFERENTIATION:

Aggamin is exclusively focused on addressing preeclampsia, a women's health issue. The company developed a preeclampsia diagnostic test marketed in the EU and Asia, is in Ph II clinical trials with a medical device therapy and is developing a biologic drug to reverse and prevent preeclampsia

MISSION STATEMENT:

To commercialize therapies for women's health indications.

PROBLEM:

Unmet medical needs for women's health.

SOLUTION:

Issued IP for validated pathways. Company founders successfully commercialized diagnostic for indication creating market for therapy.

Antiva Biosciences

PRIMARY SECTOR/TA/INDICATION:	Pharmaceuticals	Infectious Diseases
RESIDENT STATUS LOCATION:	San Diego
RESIDENT STATUS:	Alumni
R&D STAGE:	Lead (H2L-LO)

KEY DIFFERENTIATION:

Intheon is pioneering the world's first neurotechnology middleware platform, powering transformative applications that connect to your mind and body – anytime.

MISSION STATEMENT:

Lead product is a topical antiviral for the treatment of high-risk strains of human papillomavirus (HPV) infections, the primary cause of cervical cancer.

PROBLEM:

Cervical cancer incidence in the US is approximately 12,000, of which 99% is attributable to HPV. HPV-associated cancers are a major global health problem, with 500,000 new cases of cervical cancer annually. While cervical neoplasias and cancer are the most well-known HPV-related conditions, HPV is also a major cause of anal neoplasias and anal cancer, oropharyngeal neoplasias that cause head and neck cancer, genital warts, and respiratory papillomatosis. The advent of the prophylactic vaccine for HPV 16/18 in 2006 was a major step forward in the fight against HPV-associated cancers. However, the prophylactic vaccines do not cover all oncogenic HPV subtypes and adoption rates have been disappointing, particularly in the US and EU. Therefore, HPV infections and the disease states driven by such infections remain a major clinically unmet need.

SOLUTION:

Antiva Biosciences's lead drug program is aimed at intervening before intraepithelial lesions in the cervix and anus become cancerous. ABI-1968 is a double prodrug of an acyclic nucleoside phosphonate with known potent anti-viral activity but poor cellular permeability and use-limiting systemic toxicity. When administered topically or locally, ABI-1968 provides rapid uptake into cells and slow release of the active metabolite, thereby overcoming the challenges of the parent compound. ABI-1968 works by directly blocking HPV replication and inducing apoptosis in HPV-infected lesions, while sparing normal cells. A Phase 1a study was completed mid-2017. ABI-1968 is currently being studied in two Phase 1b clinical studies: one in CIN 2,3 patients and another in AIN 2,3 patients.

Bloomlife

bloomlife

www.bloomlife.com

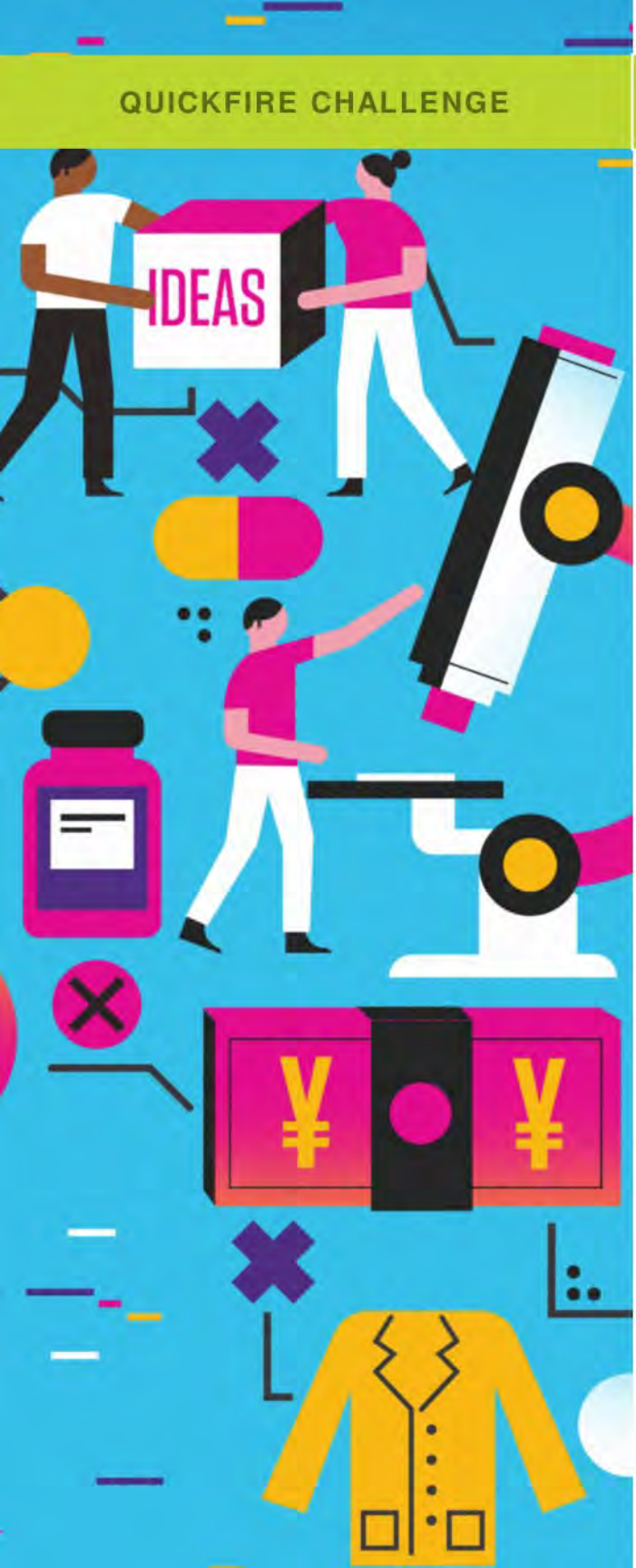|	
PRIMARY SECTOR/TA/INDICATION:	Consumer	Women's Health
SECONDARY SECTOR/TA/INDICATION:	Consumer	Wellbeing and Health	Baby Care
RESIDENT STATUS LOCATION:	Virtual
RESIDENT STATUS:	Current
R&D STAGE:	Full Clinical and Product Development

MISSION STATEMENT:

Bloomlife combines prenatal wearables with data analytics to reassure and empower moms and help doctors earlier predict and manage pregnancy complications to improve birth outcomes.

PROBLEM:

There remain many unknowns in pregnancy. Unknowns that create stress, fear, and anxiety for moms, and unknowns that lead to complications and health risk for mom and baby (20% experience pregnancy complications, 1 in 8 babies born preterm). Over the past several decades there has been an increasing rate of high risk pregnancies and pregnancy complications due to maternal age, chronic disease, and lifestyle factors. At the same time access to care is increasingly an obstacle with 50% of US counties lacking a single OBGYN. Despite spending $100B annually on pregnancy and childbirth, the US ranks last in birth outcomes.

SOLUTION:

Bloomlife is pioneering the future of prenatal care by designing mom-centered, personalized health solutions that embrace each mom's unique journey and experience. We combine clinical grade prenatal wearables with data analytics. Our prenatal wearable is a small patch worn on mom's belly that non-invasively tracks important health parameters of mom and baby (maternal heart rate, stress, sleep, uterine activity + fetal heart rate + fetal movement). We can further capture self-reported (age, weight, mental health, drug/alcohol use) and environmental factors via the smartphone. Our analytics backend uses machine learning algorithms to identify modifiable risk factors for pregnancy complications and predict events (e.g preterm birth). Information is served to mom via a smartphone app where we deliver the right information, to the right mom, at the right time. With better information tailored to her, we take the guesswork out of pregnancy for mom to educate, reassure, and empower healthy decisions during this life changing period.

CallMidwife.com

https://callmidwife.com/en/

PRIMARY SECTOR/TA/INDICATION:	Consumer	Wellbeing and Health	Baby Care
RESIDENT STATUS LOCATION:	Virtual
RESIDENT STATUS:	Current
R&D STAGE:	Full Clinical and Product Development

MISSION STATEMENT:

Developed a web-based and mobile app for pregnant women and parents that enables parents to monitor their pregnancy, diagnose various complaints and access home. treatment guidelines.

PROBLEM:

Pregnant mothers and new parents often need immediate advice, emotional support or consultation for numerous and varied questions related to pregnancy and newborns. Easy access to such information can help prevent and solve problems related to women's and children's health and well-being, as well as support the health system.

SOLUTION:

CallMidwife.com is a web-based and mobile app for pregnant women and parents that uses evidence-based algorithms created by medical experts which enables parents to monitor their pregnancy, diagnose various complaints and access home treatment guidelines. In addition, CallMidwife.com offers 24/7 midwife consultation services via video, phone and live chat and can provide emotional support or advice on how to cope with any issues that may occur with a newborn baby.

Control Panel

https://control-panel.io/

PRIMARY SECTOR/TA/INDICATION:	Medical Devices	Diagnostics
SECONDARY SECTOR/TA/INDICATION:	Medical Devices	Diagnostics	Women's Health
RESIDENT STATUS LOCATION:	Bay Area – MBC SF
RESIDENT STATUS:	Current
R&D STAGE:	Early Technical Feasibility and Prototyping

MISSION STATEMENT:

Our general company mission is "Wellness for every woman."

PROBLEM:

Routine diagnostics require women to sacrifice time, money, and privacy.

SOLUTION:

We're making diagnostic tests for women more convenient than ever before by combining state-of-the-art diagnostics with best-in-class logistics to make at-home tests focused on female health both feasible and affordable.

iSono Health

www.isonohealth.com

PRIMARY SECTOR/TA/INDICATION:	Medical Devices
SECONDARY SECTOR/TA/INDICATION:	Health IT
RESIDENT STATUS LOCATION:	Virtual
RESIDENT STATUS:	Current
R&D STAGE:	Early Technical Feasibility and Prototyping

MISSION STATEMENT:

iSono Health is transforming breast cancer screening by combining artificial intelligence (AI) and automated ultrasound to empower women and physicians with accessible and personalized breast health monitoring.

PROBLEM:

Every year 1.7 million women get diagnosed with breast cancer and 1.5 billion women need breast cancer screening. Mammogram as a screening tool has significant shortcomings: 1) insufficient access 2) x-ray radiation; 3) deficient sensitivity in dense breast tissue affecting more than 47% of women in US/Europe and 70% of women in Asia. As a result, 39% of breast cancers are discovered after spreading beyond local tissue, which highlights the pressing need for more accessible detection of cancers at earlier stages, when treatment is most effective and costs 10x less compared to late stage. Ultrasound is a scalable and highly sensitive technology proven to identify tumors at earlier stages. However, the adoption of ultrasound as been limited due to variability of scans and interpretation based on the operator skill resulting in false positives, lengthy exam time (15-30mins), and shortage of ultrasound specialists. Automated breast ultrasound (ABUS) systems improve on limitations of hand-held ultrasound, however, adoption and accessibility of ABUS has been limited, especially in point-of-care settings, due to high capital cost, and large equipment size.

SOLUTION:

Our platform combines compact, automated ultrasound with AI. Our patented ultrasound scanner automatically captures 3D images of whole breast in 1min. The scanner attaches to a bra-like accessory, communicates with a smart device, and data is transferred to a secure cloud for storage and deep learning. Our deep learning algorithm identifies abnormal masses and tracks changes in breast tissue using acoustic biomarkers extracted from quantitative ultrasound data. Unlike other imaging modalities, our system captures breast in its natural shape, produces repeatable images independent of operator skill in 1 minute without the need for expensive capital equipment, radiation, and patient discomfort.

Mercy BioAnalytics, Inc.

MERCY
BIOANALYTICS

www.mercybio.com

PRIMARY SECTOR/TA/INDICATION:	Pharmaceuticals	Diagnostics
RESIDENT STATUS LOCATION:	Boston - LabCentral
RESIDENT STATUS:	Current
R&D STAGE:	Discovery (Research, TI/TV)

KEY DIFFERENTIATION:

We are developing plasma-based assays that promise significantly greater sensitivity and specificity for stage I cancer than competing approaches, including those using cell-free nucleic acids, circulating tumor cells, and proteomics.

MISSION STATEMENT:

Mercy BioAnalytics (MBA) is dedicated to developing liquid biopsy to detect cancer at stage I, when it is more likely to be cured, and improve the efficiency of clinical trials.

PROBLEM:

Every year 600,000 Americans die of cancer. The mortality and morbidity of cancer could be greatly reduced by detecting cancer early; early cancer detection improves survival four to ten times across cancer types. For example, the five-year survival rate of ovarian cancer is 92% and 14% for stage I and IV disease, respectively. Despite the large difference in survival, only 15% of women are diagnosed with stage I ovarian cancer. Many patients continue to be diagnosed with late-stage cancer because of the lack of an effective screening test. Secondly, the FDA is putting pressure on pharmaceutical companies to incorporate biomarkers into their oncology clinical trial strategies to more precisely find patients likely to respond. The motivation for increased precision is driven by the low average response rate for oncology treatments, currently at 24%, meaning 3 out of 4 patients will not benefit from receiving a prescribed oncology drug. Many of the world's top pharma companies are now looking for biomarkers that will predict drug sensitivity, drug efficacy, or disease progression. Moreover, biomarkers used to stratify patients in clinical trials from 2010 to 2017 have increased the chance the drug is FDA approved by three times. Given the advantages of biomarkers, Dr. Pascal Soriot, the CEO of AstraZeneca, has mandated in 2015 that every new therapeutic asset under development at the company have an associated biomarker.

SOLUTION:

Mercy BioAnalytics' (MBA) solution is highly interdisciplinary, utilizing new techniques from data science (machine learning), bioengineering (microfluidics), and targeted sequencing. We are identifying biomarkers and developing a novel form of liquid biopsy diagnostic. Our computational platform has identified several unique cancer biomarkers with much higher sensitivity and specificity for early-stage cancers than FDA approved and competing platforms. FDA approved approaches to cancer screening include medical procedures, protein biomarkers, and medical imaging. Medical procedures are impractical for screening on a large scale due to invasiveness and infrastructure needs. Protein biomarkers, such as prostate specific antigen, have a high-false positive rate, leading to over-diagnosis. Medical imaging exposes patients to radiation and is often not applicable to all patients; mammograms, for example, are less sensitive and specific for women with dense breasts. Our approach would conversely require light infrastructure and be highly sensitive and specific, universally applicable to all patients, and non-invasive. Unlike companies pursuing similar goals, including Grail, Foundation Medicine, Guardant Health, and Personal Genome Diagnostics, our instrumentation is designed to survey certain classes of biomolecules that have not been previously examined by these companies. As such, we may uniquely detect cancers that are less than 1 cm3, identify the cancer's tissue of origin, and pick-up on drug sensitivity or resistance markers earlier.

PRIMARY SECTOR/TA/INDICATION:	Medical Devices	Health Tech
SECONDARY SECTOR/TA/INDICATION:	Pharmaceuticals	Neuroscience	Schizophrenia
RESIDENT STATUS LOCATION:	Toronto
RESIDENT STATUS:	Current
R&D STAGE:	Pre-Clinical / Early Mechanical

KEY DIFFERENTIATION:

Digital platform that allows for real time assessment of cognitive function in psychiatric disorders.

MISSION STATEMENT:

A Joint Venture between CAMH and MEMOTEXT, A4i aims to solve many of the current problems across the schizophrenia healthcare continuum. An evidence-based, peer-to-peer patient centric mobile app and provider portal, A4i enhances both illness self-management and provider engagement to better support recovery, medication adherence and community functioning while predicting and attempting to reduce relapse risk for people living with schizophrenia and psychosis.

PROBLEM:

Schizophrenia occupies 1 out of 12 hospital beds in Canada, costing $6.85B annually in healthcare costs and effective services are hampered by several complex, compounding factors. Currently there are no commercially available and/or clinically proven digital or mobile health offerings that provide a solution to improve medication adherence in patients with schizophrenia. With a 70% mobile tech adoption among patients, A4i is a response to the gaps in the current system of care for individuals with schizophrenia-spectrum illnesses.

SOLUTION:

Our technology is unique in that it is designed with clinical expertise of a leading mental health institution and the expertise of a digital health commercialization innovation team. Behind this team is a robust and proprietary technology with clinically specific IP and significant market access both through commercial and clinical collaborative opportunities. The IP will relate to the clinical decision rules used by the system to determine content distribution and interpretation of ambient and subjective health data. A4i combines multiple frameworks (social activation, stress, anxiety, motivation and cognition) to dynamically engage, collect data, tailor and deliver (anonymized) peer-to-peer and evidence-based content. A4i uses interactions, usage and ambient sleep monitoring, pioneering the use of machine learning and hypothesis-driven content feed and data analysis to combine subjective and objective data elements to segment intervention content in real-time. These key functions of A4i are tailored to the specific needs and preferences of individual users. They were developed from a rigorous process of iterative and incremental development that involved reviews of the academic literature and building from proven e-health strategies. Most importantly, active participation of end-users and key stakeholders engaged as advisors throughout the course of iterative testing. The system which will be accessible both with smart (iOS/Android) and feature (non-smart/flip phones) will be unique in its ability to adapt the intervention to the specific needs and behaviors of the patient/user.

HealthBeacon

PRIMARY SECTOR/TA/INDICATION:	Consumer	Health Tech	Health & Healing
RESIDENT STATUS LOCATION:	Virtual
RESIDENT STATUS:	Current
R&D STAGE:	Full Clinical and Product Development

KEY DIFFERENTIATION:

Tiatros has tested their digital health program in collaboration with the VA on soldiers with PTSD.

MISSION STATEMENT:

HealthBeacon is a medication adherence technology company that develops smart tools for managing medication.

PROBLEM:

Poor medical adherence has been estimated to be a $290 billion issue annually by the New England Health Institute. They estimate that 2 billion cases of non-adherence are avoidable. Clinical studies have demonstrated that only 50%-70% of patients adhere properly to prescribed drug therapy. Smart connected devices have demonstrated an ability to improve adherence by as much as 27%. (Partners Centre for Connected Health 2010).

SOLUTION:

HealthBeacon has developed an FDA cleared, smarts sharps system that is able to track whether a patient has taken their medication and help them stay adherent to their prescription schedule. This system has been clinically reviewed, validated by the pharmaceutical industry and has been integrated into patient care programs throughout North America and Europe, delivering valuable data to both the patient and their clinical team.

Holmusk

holmusk

PRIMARY SECTOR/TA/INDICATION:	Pharmaceuticals | Neuroscience | Data analysis
SECONDARY SECTOR/TA/INDICATION:	Pharmaceuticals | Health Tech
RESIDENT STATUS LOCATION:	NYC
RESIDENT STATUS:	Current
R&D STAGE:	Discovery (Research, TI/TV)

KEY DIFFERENTIATION:

End to end collation of mental health data between patients and physicians enabling a holistic view of the patient experience enabling better clinical decision making.

MISSION STATEMENT:

To use technology to enhance data-enabled, human-driven healthcare and improve the lives of people with chronic and behavioural health.

PROBLEM:

Behavioral health patients are underserved. Solutions to behavioral health, mental health and neuropsychiatric diseases are limited, with the practice of clinical care and the rate of investment in research and development of new drug treatments unable to keep up with the intensity of the problem.

SOLUTION:

Holmusk, through the capture, organizing and analytics of patient behavioral health data, is building a next generation behavioral health platform to enable the delivery of quality care for patients suffering from mental health disorders. This platform incorporates a behavioral health specific electronic health record system (MindLinc 2.0), combined with a digital health platform (HealthLinc) gathering digital phenotype data outside of clinician visits to create the largest longitudinal real-world behavioural health database (Holmusk Database). Holmusk's proprietary algorithms (Holmusk Analytics) stitch together these two types of data, processing & translating them into a continuous disease trajectory for individual patients. This brings an unprecedented understanding of patient mental health, allowing pharma companies, clinicians and researchers to investigate needs of patients and design new therapeutics, drugs and interventions which can be tested readily on a network of community mental health clinics.

ICmed

www.icmedonline.com

PRIMARY SECTOR/TA/INDICATION:	Pharmaceuticals	Health Tech
RESIDENT STATUS LOCATION:	Boston
RESIDENT STATUS:	Current
R&D STAGE:	Marketed Products

KEY DIFFERENTIATION:

Enables integration of various data sources for use by patients and caregivers and can be utilized by external stakeholders such as payors and providers.

MISSION STATEMENT:

To use technology to enhance data-enabled, human-driven healthcare and improve the lives of people with chronic and behavioral health.

PROBLEM:

Value-based models of care require sustained patient engagement, adherence to care plans, coordination among diverse provider care teams, free exchange of relevant data in real time, and unburdened caregiver support. Otherwise, quality outcomes and patients are at risk, providers stand to lose income, and caregivers' role is compromised. Traditional Electronic Medical Record platforms, built for health systems and payers to organize patient data in technical jargon to capture and facilitate reimbursement, are NOT a consumer tool and cannot be adapted as such.

SOLUTION:

ICmed is a patient- and caregiver-centered communication and collaboration mobile software solution allowing the patient-caregiver dyad to work as a team, in coordination with their provider care staff. Users OWN, SHARE and LEARN from their health care provider staff (nurse, PA, case worker) and their health profile, medical conditions and collected data in a safe, secure environment. The provider care team works in collaboration with the patient-caregiver dyad through their enterprise dashboard, tailored to their workflow and synchronized with the mobile app. Imperative: None of our tech development or workflow design is undertaken without the informal (usually family) caregiver in mind. This is unique. Limited but compelling research indicates that medical outcomes and preventative health are both improved with the inclusion of an informal (usually family) caregiver in the plan. The ICmed business model addresses a consumer imperative to not only access one's health data, but also allow caregivers to empathize and support. Both patients and caregivers learn how to manage health independently and take direction from providers, all on a fluid communication platform. The extent of caregiver involvement in our solutions is a key differentiating competitive factor.

LIGHTHOUSE

LIGHTHOUSE

https://lighthouse247.com

PRIMARY SECTOR/TA/INDICATION:	Consumer | Health Tech | Virtual/Augmented Reality
RESIDENT STATUS LOCATION:	Virtual
RESIDENT STATUS:	Current
R&D STAGE:	Pre-Revenue/Commercial

MISSION STATEMENT:

LIGHTHOUSE uses the power of voice (e.g., Alexa) to translate doctor-prescribed health journeys into accelerated patient action.

PROBLEM:

PATIENT: Heart wrenching numbers related to patient adherence, lifestyle change and logging. Digital programs or "digital therapeutics" have made limited evolution beyond simple reminders, check lists or log books. Tech phobia, language preference and patient literacy levels reduce the impact of many digital programs.

PHARMA: Outcomes-based healthcare remains an industry trend on every pharma company's ten-year plan. It is not inconceivable to follow the path of IBM, who over the course of a decade changed their revenue mix from 80% hardware/20% services to the inverse. "How?" remains the big open question.

SOLUTION:

Voice based patient programs. LIGHTHOUSE puts your doctor's care plan on your kitchen table, available with the simple phrase "Alexa, check in with LIGHTHOUSE".

- LIGHTHOUSE connects directly into a physician's EMR and translates care plans, discharge protocols or care priorities into bite-sized patient programs
- We use sophisticated patient behavior models to build core skills in diet, physical activity, taking your meds and writing stuff down
- A voice-based program triggers significantly less tech-phobia (everyone talks), multiple language support and improved health literacy
- The "magic" is in the way that LIGHTHOUSE constructs patient conversations to build patient relationships, meet patients at "their" commitment level and translate care plans into daily actions – all to drive better patient outcomes.

MyInfo, LLC (dba MyHealth.us)

www.myhealth.us

PRIMARY SECTOR/TA/INDICATION:	Consumer | Health IT | Mobility/Wearables
RESIDENT STATUS LOCATION:	NYC
RESIDENT STATUS:	Current
R&D STAGE:	Various

KEY DIFFERENTIATION:

MyHealth.Us is the largest source for consumers to collect their medical and Medicare records, track healthcare observations, and find better consumer-facing solutions online and via 24/7 call center for emergency treatment and diagnostic assistance. Its combined patent-pending patient engagement and service delivery model reduces claims, errors and time to treatment, and improves outcomes. It is very low cost, easy to use, secure, comprehensive, and used by four labor unions and one insurer - and growing.

MISSION STATEMENT:

Consumer-facing agnostic healthcare platform to help people get and stay well quickly, affordably, with fewer errors, more preventive and predictive care by using innovative care solutions and behavioral inputs for lasting benefits.

PROBLEM:

Lack of data (difficultly accessing and sharing of medical records, lack of patient engagement, failure to record patient/family/caregiver observations). Limited access to innovative solutions with sufficient data for predictive and preventive care. Rudimentary care delivery solutions.

SOLUTION:

Sell MyHealth LifeCode ID and 24/7 service to businesses, insurers and communities to provide free to individuals and family who track their information in response to emails, text and other encouragements, and then receive assistance and online access to broad range of innovative affordable solutions. Unique is our building of expertise in patient engagement and solution delivery. Patent files for storing medical records and observations together with common ID.

Mymee

mymee
know myself

PRIMARY SECTOR/TA/INDICATION:	Pharmaceuticals | Immunology | Digital Health
RESIDENT STATUS LOCATION:	NYC
RESIDENT STATUS:	Current

KEY DIFFERENTIATION:

Novel method for analyzing patient parameters with nutritional input to understand response to stimuli and potentially reduce pharma therapy burden.
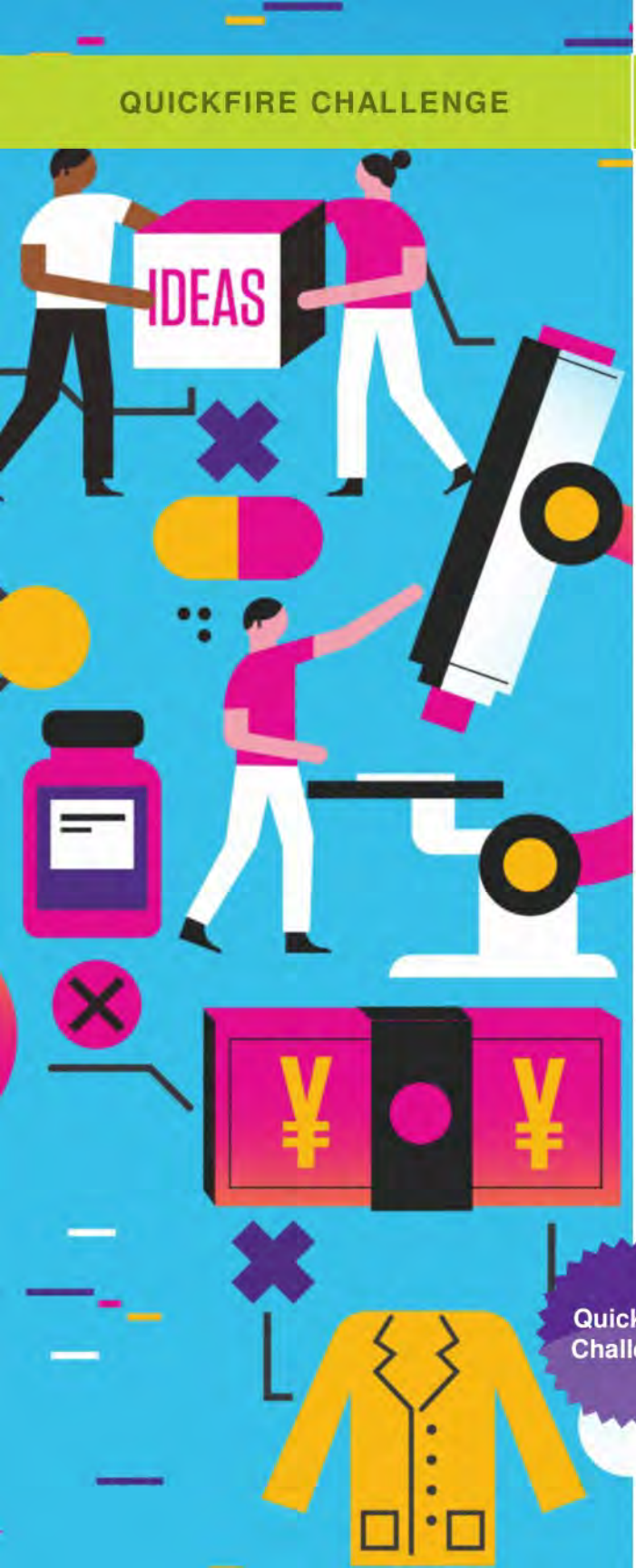
MISSION STATEMENT:

Everybody is different, your treatment should be too. Our mission is to bring precision medicine to the masses, improving outcomes while reducing cost. We are starting by fixing chronic autoimmune disease while working to validate the intervention as a cost saving tool because it reduces the number of drugs and surgeries that patients need. We want to work with insurers and self-insured employers in shared savings contracts and provide our intervention to the patients for free.

PROBLEM:

There are 24 million Americans who suffer from at least one autoimmune disease, a $136B problem while another 100 million have elevated ANA (pre-autoimmune disease), making it the second largest pop health problem facing our country. The current standard of care for autoimmune disease patients usually involves putting patients on steroids and immunosuppressant drugs, or getting surgeries. Unfortunately, these drugs are expensive and lead to debilitating side effects, including organ failure and death. There are 157 different autoimmune diseases and most are rare, so this costly population has been largely ignored. We solve the problem underlying all of them - immune dysregulation which allows us to consolidate all these rare diseases into one massive problem worth solving.

SOLUTION:

Our Digital Therapeutics program reverses the symptoms of chronic autoimmune disease through data analytics and health coaching which reduces or eliminates the need for expensive specialty pharmacy drugs. In 16-weeks Mymee builds data models of each participant based on patient-generated health data. Week by week the coach customizes the app so that patients track an adaptive set of potential triggers against their symptoms. Machine learning allows us to collect the minimum viable data to help coaches identify the root cause of each patient's disease. They create behavioral change to mitigate or reverse symptoms, dramatically improving quality of life and decreasing cost of care.

Neurotrack

Neurotrack

PRIMARY SECTOR/TA/INDICATION:	Consumer | Health Tech | Sensors
SECONDARY SECTOR/TA/INDICATION:	Pharmaceuticals | Neuroscience | Alzheimer's Disease
RESIDENT STATUS LOCATION:	Virtual
RESIDENT STATUS:	Current
R&D STAGE:	Pre Revenue/Commercial

KEY DIFFERENTIATION:

At Neurotrack, our neuroscientists, neuropsychologists and engineers have developed the Imprint Memory Assessment based on breakthrough research. Taken online, the assessment offers advanced eye tracking technology in the comfort and privacy of an individuals own home and allows recurring assessment to show and predict decline over time.

MISSION STATEMENT:

Silicon-Valley-based Neurotrack, led by Elli Kaplan, CEO, is on a mission to transform the diagnosis and prevention of memory loss and related diseases like Alzheimer's.

PROBLEM:

Alzheimer's disease is the greatest healthcare challenge of our generation. Its insidious and debilitating nature takes an enormous toll on the quality of life of those who suffer from the disease as well as their family members and caretakers.

SOLUTION:

Neurotrack is commercializing the first fully integrated digital platform for assessing and preventing cognitive decline and Alzheimer's disease. Neurotrack's digital therapeutic is validated to delay Alzheimer's and improve cognition. The companion Imprint 30-min assessment can assess an individual's risk for cognitive decline and the 5-minute Imprint Monitor is used to engage and monitor patients while on the digital therapeutic. The platform is available on desktop and mobile.

QuickFire Challenge

Q1.6

www.questions.ai

PRIMARY SECTOR/TA/INDICATION:	Pharmaceuticals	Immunology| Rheumatoid Arthritis
RESIDENT STATUS LOCATION:	Beerse
RESIDENT STATUS:	Current
R&D STAGE:	Biomarkers

KEY DIFFERENTIATION:

Using so called Micro Moments to capture data from people in moments that are "free".

MISSION STATEMENT:

Developing the Q platform to improve patient engagement and capture more and more accurate data, by combining multiple data streams and multiple communication channels for large pharma and medical device companies.

PROBLEM:

Keeping patients engaged in medical therapy and clinical studies by interacting through micro moments. Collecting high quality data and combining data streams at lower cost for health care professionals.

SOLUTION:

We split complex interactions into micro-moment communications. We make the interactions personalized and hyper-relevant using a dynamic decision tree, that adapts the interaction with the patient to their situation. With less effort we get more data, more quickly, more reliably and of a better quality.

Savor Health

PRIMARY SECTOR/TA/INDICATION:	Pharmaceuticals	Health IT	Mobile Wellness
RESIDENT STATUS LOCATION:	NYC
RESIDENT STATUS:	Current

KEY DIFFERENTIATION:

1. Disease-specific approach to personalizing nutrition solutions leveraging evidence-base science, clinical best practices and unique patient data (as compared to a broader, more generalized approach to nutrition and nutrition intervention).

2. Multi-variable personalization algorithm, combined with unconstrained "solution set" (versus the 5-7 predetermined options/solutions offered by others in the market) results in dynamic, personalized and clinically appropriate recommendations for cancer patients who also have multiple co-morbid conditions, medications, side effects, and medical needs/issues that need to be "solved for" nutritionally in order to impact positive clinical outcome at lower total cost of care.

MISSION STATEMENT:

Savor Health's mission is to improve the lives of people with cancer by empowering them with safe, evidence-based and easily actionable solutions to their nutritional issues.

PROBLEM:

Savor Health is addressing the highly prevalent problem of malnutrition and nutrition-related side effects and symptoms experienced by cancer patients. Ultimately, we intend to leverage our technology solution in other chronic medical conditions where treating and managing nutritional issues has also been shown to improve outcomes. The nutritional issues of cancer patients have a negative impact on all stakeholders in the healthcare system - payors (including self-insured employers), providers and patients and, as a result, all stakeholders have an incentive to find solutions to address these issues. Evidence-based literature confirms that nutritional issues are prevalent in people with cancer and that up to 80% of patients experience them. Malnutrition is the #2 secondary diagnosis in cancer patients and 1/3 of all cancer deaths are due to severe malnutrition. HemOnc Today in June 2017 reported that severe malnutrition in cancer patients today is "almost epidemic." Malnourished patients experience greater treatment toxicity and are less adherent to drug therapy. Patients that are malnourished drive up healthcare costs as they experience a 54% higher rate of re-admission and a 4-6 day longer length of stay.

SOLUTION:

The Savor Health solution is an AI-based personalized nutrition care management and patient engagement technology platform designed to prevent and manage the nutritional issues of people with chronic medical conditions, initially cancer patients. Created by a team of oncology-credentialed medical professionals and data scientists, Savor Health's technology provides highly personalized, clinically appropriate nutrition recommendations based on evidence-based science, clinical best practices and unique patient data. Through its patent-pending chat bot, Savor Health engages with patients and caregivers and unique patient data is collected. Data is then analyzed and, based on a proprietary rules engine and expert coaching dialogues, actions and recommendations, patients are provided with appropriate nutrition-related advice and support. As patient treatments and needs change, Savor Health's recommendations are also adjusted. Feedback loops and machine learning enable greater personalization and, ultimately, prescriptive nutrition solutions. While initially focused in oncology for proof of concept, the technology will be replicated in other chronic medical conditions where proper nutrition has been shown to improve clinical and quality of life outcomes to reduce healthcare spending.

Tiatros Inc.

TIATROS

www.tiatros.com

PRIMARY SECTOR/TA/INDICATION:	Consumer | Health Tech | Digital Therapeutics
RESIDENT STATUS LOCATION:	MBC SF
RESIDENT STATUS:	Alumni
R&D STAGE:	Pre Revenue/Commercial

KEY DIFFERENTIATION:

Tiatros has tested their digital health program in collaboration with the VA on soldiers with PTSD.

MISSION STATEMENT:

Tiatros provides resilience skills training programs and analytic tools that enable Human Resources and Employee Benefit groups to actively manage the productivity, mental health and psychological resilience of their workforce.

PROBLEM:

Large self-insured employers increasingly understand that underspending on mental health results in overspending on physical health. They understand that the key to lowering their corporate healthcare costs is to provide access to effective mental health care. They need affordable, evidenced-based behavioral health and psychological resilience skills services that result in quantitatively measurable improvements to the overall health, productivity and psychological resilience of their entire workforce.

Employers must be part of the solution to this problem, because they bear much of its cost. Collectively, employers lose $200 billion dollars in productivity each year due to untreated mental illness, while spending another $200 billion dollars to treat anxiety and depression in the workforce. That said, lost productivity costs and the direct cost of mental health care are just the tip of the proverbial iceberg for self-insured employers. The largest and most difficult-to-quantify part of their corporate healthcare budgets is spent indirectly on mental illness, i.e., hundreds of billions of dollars of healthcare spending on gastrointestinal illnesses, musculoskeletal illnesses, insomnia, pre-diabetic conditions, heart disease, substance abuse, migraine, and other chronic illnesses that are greatly exacerbated by untreated co-occurring mental illness.

SOLUTION:

Tiatros programs consist of 8 weekly sessions that each take approximately 90 minutes to complete. 12 – 16 participants who have similar health challenges and personal goals form a 'peer group'. Each peer group is moderated by a trained facilitator and overseen by an expert CBT therapist. Participants access their programs asynchronously, from anywhere, on their personal devices, when it is most convenient.

Participants learn and practice CBT skills with the other members of their peer group. We teach evidence-based CBT exercises, including Narrative Therapy and storytelling, journaling, and mindful meditation, that are carefully tailored to resonate with participants. We use social media-styled methods to foster a supportive and nurturing community that is itself therapeutic, acting to encourage every participant to actively engage in and complete his/her program. This approach greatly increases the number of therapeutic touch points, with most participants engaging daily, and some several times per day, so Tiatros achieves 75% program completion rates and clinical outcomes that are as good those seen in psychotherapies conducted by expert psychiatrists at top medical centers.

Tiatros integrates natural language analytics to personalize the user experience and sustain high levels of engagement; improve clinical outcomes; and provide the tools that our customers need to make data driven decisions to manage their budgets to optimize the health and psychological resilience of their workforce.

telmedx

http://www.telmedx.com/

PRIMARY SECTOR/TA/INDICATION:	Consumer	Health IT	Mobile Wellness
RESIDENT STATUS LOCATION:	Virtual
RESIDENT STATUS:	Alumni
R&D STAGE:	Full Clinical and Product Development

MISSION STATEMENT:

telmedx provides a mobile phone-based telemedicine platform that enables doctors, nurses and other caregivers to engage patients wherever they happen to be located and whenever they need to be seen via high-resolution live video and remote image capture.

PROBLEM:

The current model of caring for patients in person is unsustainable. While traditional videoconference systems are being used in telemedicine, they simply cannot deliver the resolution and clarity needed for doctors to remotely make clinical decisions with confidence.

SOLUTION:

The telmedx mobile telemedicine platform delivers high-resolution live video and photos over wireless networks, enabling doctors to deliver care remotely and confidently without the need for patients to visit medical facilities.

The telmedx platform provides superior clarity and resolution via a secure, HIPAA/HITECH and EU-compliant live medical-grade video feed from the digital cameras in the back of mobile phones and tablets, even in low bandwidth environments. WiFi and WiMax networks can also be used, as well as WiFi via satellite. The live video and audio continue while still images are captured, and the video can be started and stopped during an existing audio call, without interrupting that call. Multiple doctors in different locations can view the same video, and each can independently capture their own images, thereby making specialist consultations seamless. See www.telmedx.com/video for the platform in use. The telmedx platform delivers much higher quality voice and video than traditional Voice over Internet Protocol (VoIP) video conferencing systems.

Kaiser Permanente in Portland managed about 25 wound care and home health patients per month in 2013. Today, using the telmedx platform, KPNW has scaled to more than 3,200 wound care virtual consults per year. In 94% of the consults, the patient was treated at home and did not go to a brick-and-mortar medical facility.

uMedeor

uMed

PRIMARY SECTOR/TA/INDICATION:	Pharmaceuticals	Health IT	Blockchain
RESIDENT STATUS LOCATION:	NYC
RESIDENT STATUS:	Current

KEY DIFFERENTIATION:

uMed uniquely allows research organizations to remotely engage patients and monitor outcomes in real-time across a network of sites.

Our competitors such as TriNetX are unable to support real-time engagement based on queries to their dataset, limiting value across the product lifecycle.

MISSION STATEMENT:

uMed aims to be the key enabler to precision research and individualized care by driving targeted access to patients and their health data.

PROBLEM:

It is not just clinicians who need to reach patients, and their health data; regional groups, payers, charities, academics and industry partners increasingly collaborate to drive targeted programs spanning direct care to cutting-edge research. However, there are many legal & ethical barriers that must be addressed to enable access, and as yet no satisfactory solution exists.

SOLUTION:

uMed combines technology with a unique legal approach to ensures patient's rights are respected whilst enabling 'at scale' access to patients and the health data. We consolidate pseudonymized data from healthcare provider partners, allowing validated 3rd party organizations to identify targeted patient cohorts. We then channel communications and consent requests through the patient's healthcare provider with the following benefits:

- Patients: Transparency over data sharing, increased access to research, and feedback on their contributions
- Healthcare Providers: Zero cost platform for internal risk stratification & engagement programs
- Research Orgs: Rapid access to patients and health data from targeted cohorts across our network; enabling precision campaigns in the pre & post market space, as well as access to longitudinal health data for RWE/RWD.

Veta Health

veta Health

https://www.myvetahealth.com/

PRIMARY SECTOR/TA/INDICATION:	Pharmaceuticals | Health IT | Mobile Wellness
RESIDENT STATUS LOCATION:	NYC
RESIDENT STATUS:	Current

KEY DIFFERENTIATION:

1. Disease-specific approach to personalizing nutrition solutions leveraging evidence-base science, clinical best practices and unique patient data (as compared to a broader, more generalized approach to nutrition and nutrition intervention).
2. Multi-variable personalization algorithm, combined with unconstrained "solution set" (versus the 5-7 predetermined options/solutions offered by others in the market) results in dynamic, personalized and clinically appropriate recommendations for cancer patients who also have multiple co-morbid conditions, medications, side effects, and medical needs/issues that need to be "solved for" nutritionally in order to impact positive clinical outcome at lower total cost of care.

MISSION STATEMENT:

Veta Health offers protocol-based care solutions using digital technologies. Our solutions accompany patients on their care journeys in non-traditional care settings to improve transparency and patient empowerment.

PROBLEM:

90% of the patient journey occurs beyond the reach of clinical teams and patients are often left to their own devices to interpret and act on their disease or condition. There is a lack of evidence-based medicine and clinically-driven patient support mechanisms, which leads to poor health outcomes and adherence.

SOLUTION:

The Veta Health platform utilizes a combination of patient tracking & support mechanisms from digital biomarkers to medication adherence to content and community support. Real-time patient tracking and automated patient management is married with advanced analytics to intelligently respond to patients in real-time. The flexible technology can be applied for automated care management and advanced risk scoring as well as a digital wrapper for drug therapies.

Winterlight labs

WINTERLIGHT

PRIMARY SECTOR/TA/INDICATION:	Pharmaceuticals | Neuroscience | Alzheimer's Disease
SECONDARY SECTOR/TA/INDICATION:	Pharmaceuticals | Health Tech
RESIDENT STATUS LOCATION:	Toronto
RESIDENT STATUS:	Current
R&D STAGE:	Discovery (Research, TI/TV)

KEY DIFFERENTIATION:

Algorithm has demonstrated potential to identify AD from clinical trial data.

MISSION STATEMENT:

To detect and diagnose cognitive and mental health conditions through speech and language using artificial intelligence.

PROBLEM:

Currently neuropsychology assessments are:

1. Time consuming & expensive
2. Subjective
3. Stressful
4. Can't be done often

SOLUTION:

We're the only company that uses speech and language to computationally detect cognitive impairment.

Johnson&Johnson INNOVATION | JLABS

Introduction

- JLABS works with a variety of companies within its portfolio that fit the stated VA Areas of Interest ("AOI", *e.g.*, telemedicine, mental health and woman's health)

- The profiles contained in this deck have been selected to provide examples of companies performing unique or interesting work in the AOIs; these profiles (and other JLABS portfolio company information) are publicly available for review at https://jlabs.jnjinnovation.com/companies

- For additional information on any of the companies profiled herein, please feel free to reach out to Erika Kula @ ekula@its.jnj.com

Johnson&Johnson INNOVATION | JLABS

JLABS Mental Health Focused Companies

(19-08160-F) - 001197

App4 Independence

PRIMARY SECTOR/TA/INDICATION:	Medical Devices | Health Tech
SECONDARY SECTOR/TA/INDICATION:	Pharmaceuticals | Neuroscience | Schizophrenia
RESIDENT STATUS LOCATION:	Toronto
RESIDENT STATUS:	Current
R&D STAGE:	Pre-Clinical / Early Mechanical

KEY DIFFERENTIATION:

Digital platform that allows for real time assessment of cognitive function in psychiatric disorders

QuickFire Challenge

MISSION STATEMENT:

A Joint Venture between CAMH and MEMOTEXT, A4i aims to solve many of the current problems across the schizophrenia healthcare continuum. An evidence-based, peer-to-peer patient centric mobile app and provider portal, A4i enhances both illness self-management and provider engagement to better support recovery, medication adherence and community functioning while predicting and attempting to reduce relapse risk for people living with schizophrenia and psychosis.

PROBLEM:

Schizophrenia occupies 1 out of 12 hospital beds in Canada, costing $6.85B annually in healthcare costs and effective services are hampered by several complex, compounding factors. Currently there are no commercially available and/or clinically proven digital or mobile health offerings that provide a solution to improve medication adherence in patients with schizophrenia. With a 70% mobile tech adoption among patients, A4i is a response to the gaps in the current system of care for individual s with schizophrenia-spectrum illnesses.

SOLUTION:

Our technology is unique in that it is designed with clinical expertise of a leading mental health institution and the expertise of a digital health commercialization innovation team. Behind this team is a robust and proprietary technology with clinically specific IP and significant market access both through commercial and clinical collaborative opportunities. The IP will relate to the clinical decision rules used by the system to determine content distribution and interpretation of ambient and subjective health data. A4i combines multiple frameworks (social activation, stress, anxiety, motivation and cognition) to dynamically engage, collect data, tailor and deliver (anonymized) peer-to-peer and evidence-based content. A4i uses interactions, usage and ambient sleep monitoring, pioneering the use of machine learning and hypothesis-driven content feed and data analysis to combine subjective and objective data elements to segment intervention content in real-time. These key functions of A4i are tailored to the specific needs and preferences of individual users. They were developed from a rigorous process of iterative and incremental development that involved reviews of the academic literature and building from proven e-health strategies. Most importantly, active participation of end-users and key stakeholders engaged as advisors throughout the course of iterative testing. The system which will be accessible both with smart (iOS/Android) and feature (non-smart/flip phones) will be unique in its ability to adapt the intervention to the specific needs and behaviors of the patient/user.

Blackthorn Therapeutics

www.blackthornrx.com

PRIMARY SECTOR/TA/INDICATION:	Pharmaceuticals | Neuroscience | Mood Disorders
RESIDENT STATUS LOCATION:	Bay Area – SSF
RESIDENT STATUS:	Alumni
R&D STAGE:	Phase 2a

KEY DIFFERENTIATION:

Blackthorn uses a stronger data science approach for their clinical trials creating and utilizing new endpoints. They are working in these areas because they want to remove some of the subjectivity that is found in neurological clinical testing and treatment.

MISSION STATEMENT:

BlackThorn Therapeutics mission is to develop breakthrough medicines for patients with neurodevelopmental disorders with circuit dysfunction as a cause of the disorder.

PROBLEM:

Historically the approach to the discovery and development of neurobehavioral therapeutics has been grounded in categorical diagnoses (DSM) and subjective tools. This approach has resulted in limited success in bringing new treatments to the field. BlackThorn's philosophy is that by taking a circuit and physiologic based approach to neurobehavioral disorders that significant improvement can be made in developing novel CNS therapeutics. The company's approach is grounded in linking targets known to regulate neural circuits, which underlie dysregulated behaviors such as anhedonia, impulsivity or poor reward recognition, schizophrenia, and ASD. By drugging validated targets known to regulate specific behaviors the company believes that substantial improvement can be made in treating neurobehavioral disorders.

SOLUTION:

BlackThorn's circuit-based approach to neurobehavioral disorders is deep supported by advancements in technology and data science providing unique understanding and insights of the core underlying pathophysiology of neurobehavioral disorders. To address the historical challenges in neurobehavioral clinical development, such as subjectivity, patient heterogeneity and high placebo response rates, BlackThorn is leading the way in integrating novel technologies such as digital and vocal biomarkers into the clinical development process. Applying these technologies when integrated with data science insights provides BlackThorn with an ability to understand neurobehavioral disorders as never before. The result of these unique insights is hypothesized to be smaller trials, targeted to the right patients and with a higher probability of success. BlackThorn's vision is that this differentiated approach to neurobehavioral disorders will allow patients in the future to be quickly and accurately diagnosed with matched with effective and targeted treatments.

Eikonizo Therapeutics

Eikonizo Therapeutics

PRIMARY SECTOR/TA/INDICATION:	Pharmaceuticals | CNS/Neurology, Gerontology/Aging | Alzheimer's Disease
RESIDENT STATUS LOCATION:	Boston – LabCentral
RESIDENT STATUS:	Current
R&D STAGE:	Discovery (Research, TI/TV)

KEY DIFFERENTIATION:

Have proprietary PET imaging technology to be used in combination with drug discovery efforts which will enable better target engagement and dose determination.

MISSION STATEMENT:

To catalyze development of life-changing therapies by deploying rapid in vivo target engagement techniques and accelerating identification of lead drug candidates, particularly for brain diseases.

PROBLEM:

A disease-modifying treatment does not exist for Alzheimer's disease (AD) or the related neurodegenerative disease, amyotrophic lateral sclerosis (ALS).

SOLUTION:

There is a fundamental flaw in the approach of all drug candidates for AD or ALS investigated to date: a focus on single mechanistic drivers of disease. This, coupled with poor utilization of modern target engagement tools (e.g. known and novel PET radiotracers), has resulted in a patient population desperate for an evolution in medicine. Our technology leverages a novel radiotracer tool and expertise in chemistry to explore HDAC6 inhibition as a strategy to attack multiple disease related pathways underlying neurodegenerative diseases, starting with AD and ALS.

Holmusk

PRIMARY SECTOR/TA/INDICATION:	Pharmaceuticals | Neuroscience | Data analysis
SECONDARY SECTOR/TA/INDICATION:	Pharmaceuticals | Health Tech
RESIDENT STATUS LOCATION:	NYC
RESIDENT STATUS:	Current
R&D STAGE:	Discovery (Research, TI/TV)

KEY DIFFERENTIATION:

End to end collation of mental health data between patients and physicians enabling a holistic view of the patient experience enabling better clinical decision making.

MISSION STATEMENT:

To use technology to enhance data-enabled, human-driven healthcare and improve the lives of people with chronic and behavioural health.

PROBLEM:

Behavioral health patients are underserved. Solutions to behavioral health, mental health and neuropsychiatric diseases are limited, with the practice of clinical care and the rate of investment in research and development of new drug treatments unable to keep up with the intensity of the problem.

SOLUTION:

Holmusk, through the capture, organizing and analytics of patient behavioral health data, is building a next generation behavioral health platform to enable the delivery of quality care for patients suffering from mental health disorders. This platform incorporates a behavioral health specific electronic health record system (MindLinc 2.0), combined with a digital health platform (HealthLinc) gathering digital phenotype data outside of clinician visits to create the largest longitudinal real-world behavioural health database (Holmusk Database). Holmusk's proprietary algorithms (Holmusk Analytics) stitch together these two types of data, processing & translating them into a continuous disease trajectory for individual patients. This brings an unprecedented understanding of patient mental health, allowing pharma companies, clinicians and researchers to investigate needs of patients and design new therapeutics, drugs and interventions which can be tested readily on a network of community mental health clinics.

holmusk

Holobiome

www.holobiome.org

PRIMARY SECTOR/TA/INDICATION:	Pharmaceuticals | Microbiome
SECONDARY SECTOR/TA/INDICATION:	Pharmaceuticals | Neuroscience | Mood Disorders
RESIDENT STATUS LOCATION:	Boston – LabCentral
RESIDENT STATUS:	Current
R&D STAGE:	Preclinical (GLP Tox-IND)

KEY DIFFERENTIATION:

Pathway and disease specific use of microbiome as a clinical intervention with neuromodulator evaluation.

MISSION STATEMENT:

Our mission at Holobiome is to treat and prevent disease by manipulating the human microbiome. Our early focus is around treating diseases related to the nervous system, including sleep discorders, treatment-resistant depression, and irritable bowel syndrome. We seek to build portfolio and infrastructure value as we develop therapeutics (in the form of OTC probiotics and/or biologics) for these initial indications. This will enable rapid expansion into other therapeutic areas.

PROBLEM:

Up to 30% of the global population suffers from sleep issues, and this comes with a substantially increased risk of metabolic and cardiovascular disease, as well as behavioral disorders. Depression, recently classified as the leading cause of disability worldwide by the World Health Organization, affects up to 9% of adults in the U.S. per year, and an estimated 20% of the population will experience a depressive episode in their lifespan. IBS is characterized by chronic abdominal pain and discomfort, and is estimated to effect between 10 and 20% of the U.S. population. Unfortunately, a major problem with treating these disorders is the lack of efficacy of front line drugs, or lack of therapeutic options. For example, 29 – 46% of patients with depression do not see resolution or improvement of symptoms after front-line treatment, which are typically serotonin reuptake inhibitors. However, it was withdrawn due to an increased risk of adverse cardiovascular events. For sleep disorders, while several drugs exist today – such as eszopiclone (Lunesta) or zolpidem (Ambien) – many come with a high risk of addiction and a negative stigma. This is a likely reason why many individuals suffering from sleep disorders do not seek treatment (<20%). Due to limited or poor therapeutic options for sleep disorders, treatment resistant depression, and IBS, these diseases impose an enormous socioeconomic burden on society and the affected individual, with an estimated annual global cost of over one trillion dollars. We seek to fix this, providing health solutions to those in need.

SOLUTION:

The lead products of Holobiome consist of bacteria able to alter host GABAergic and Serotonergic neurotransmission. Incredibly, intervention with these neurotransmitter modulating bacteria has been shown to provide antidepressant, anxiolytics, and improved intestinal motility phenotypes, multiple animal models, and microbiome intervention in humans can alter levels of these important nearutransmitters or their prescursors. Providing these bacteria to patients will provide therapeutic efficacy in our target indications via stimulation of the enteric and peripheral nervous system locally and/or to the central nervous system via the vagus nerve. A key feature of our products are there strong safety profiles. Many existing drugs for our target indications have considerable side effects, such as weight gain, sexual dysfunction, and addiction. Microbiome-based therapeutics, consisting of naturally occurring microbes that exist in healthy humans, are expected to be exceptionally safe with minimal side effects. This inherent safety will minimize regulatory costs and hurdles, while expediting the developmental timeline compared to traditional drugs. For the probiotic path, the fact these strains have evolved with and exist in humans reinforces their safety profiles, and has been received well by the FDA for generally regarded as safe (GRAS) notification submissions.

Intheon (fka Syntrogi)

intheon

http://www.intheon.io/

PRIMARY SECTOR/TA/INDICATION:	Medical Devices | Health Tech
SECONDARY SECTOR/TA/INDICATION:	Medical Devices | Diagnostics
RESIDENT STATUS LOCATION:	San Diego – JRD
RESIDENT STATUS:	Alumni
R&D STAGE:	Pre-Clinical / Early Mechanical

KEY DIFFERENTIATION:

Intheon is pioneering the world's first neurotechnology middleware platform, powering transformative applications that connect to your mind and body – anytime.

MISSION STATEMENT:

Intheon's mission is to power the coming neurotechnology revolution by enabling turnkey integration of advanced brain & body state assessment into any application or device – anytime, anywhere.

PROBLEM:

Rapidly accelerating advances in fundamental and applied neuroscience, machine learning and AI, and physiological sensing and computing have created tremendous potential for neurotechnology to transformatively impact many facets of everyday life, including health, medicine, and wellness; human performance and ergonomics, and more. However, R&D and software infrastructure involved in developing and deploying advanced neurotechnology solutions are typically expensive, time-consuming, and requires rare expertise.

SOLUTION:

We empower businesses to surmount R&D and deployment challenges, while reducing cost and time-to-market, for their neurotechnology-related products through the first scalable "plug and play" Platform as a Service for brain & body state assessment. Our cloud middleware service, NeuroScale™, provides "anytime, anywhere" access to state-of-the-art real time and batch processing of neuronal and other physiological signals, from diverse non-invasive (+wearables) and invasive sensor hardware, through an easy-to-use API and our turnkey pipelines. Detailed analyses of individual datasets or large studies can be quickly summarized into meaningful digests through our automated NeuroScale™ Reports service. Additionally, our NeuroPype™ Enterprise desktop application suite allows researchers and developers to easily design, develop, and trial their own specialized biosignal processing pipelines, with one-click deployment to our cloud service or on-premise execution.

By enabling businesses to quickly build on advanced R&D and established infrastructure, we aim to catalyze growth, accessibility, and impact of transformative neurotechnology solutions .

Mindpax

Mindpax.me

https://mindpax.me/en/

PRIMARY SECTOR/TA/INDICATION:	Medical Devices	Health Tech
SECONDARY SECTOR/TA/INDICATION:	Pharmaceuticals	Neuroscience	Mood Disorders
RESIDENT STATUS LOCATION:	Beerse
RESIDENT STATUS:	Current
R&D STAGE:	Full Product Development

KEY DIFFERENTIATION:

The Mindpax system for collecting and analyzing data is both simple to use and works independently of hardware platforms. The Mindpax monitoring system helps to monitor biorhythms, to give insights into physical and mental wellbeing and predict mental health attacks before they happen.

MISSION STATEMENT:

We aim to become leader in digital therapy for patients suffering from the most severe mental health diseases of schizophrenia and bipolar disorder.

PROBLEM:

High costs of mental health treatment, low quality of life of psychiatric patients, no long-term information on disease development for doctors

SOLUTION:

Focus on long-term monitoring of circadian rhythms as a proxy for digital biomarker predicting relapse of severe mental health diseases.

NeuroTheryX

www.neurotheryx.com

PRIMARY SECTOR/TA/INDICATION:	Pharmaceuticals | Neuroscience | Mood Disorders
SECONDARY SECTOR/TA/INDICATION:	Pharmaceuticals | Platform | Therapeutic
RESIDENT STATUS LOCATION:	Toronto
RESIDENT STATUS:	Current
R&D STAGE:	Lead (H2L-LO)

KEY DIFFERENTIATION:

In vivo expression system provides opportunity to screen and rapidly identify drugs for treatment of neurodegenerative models.
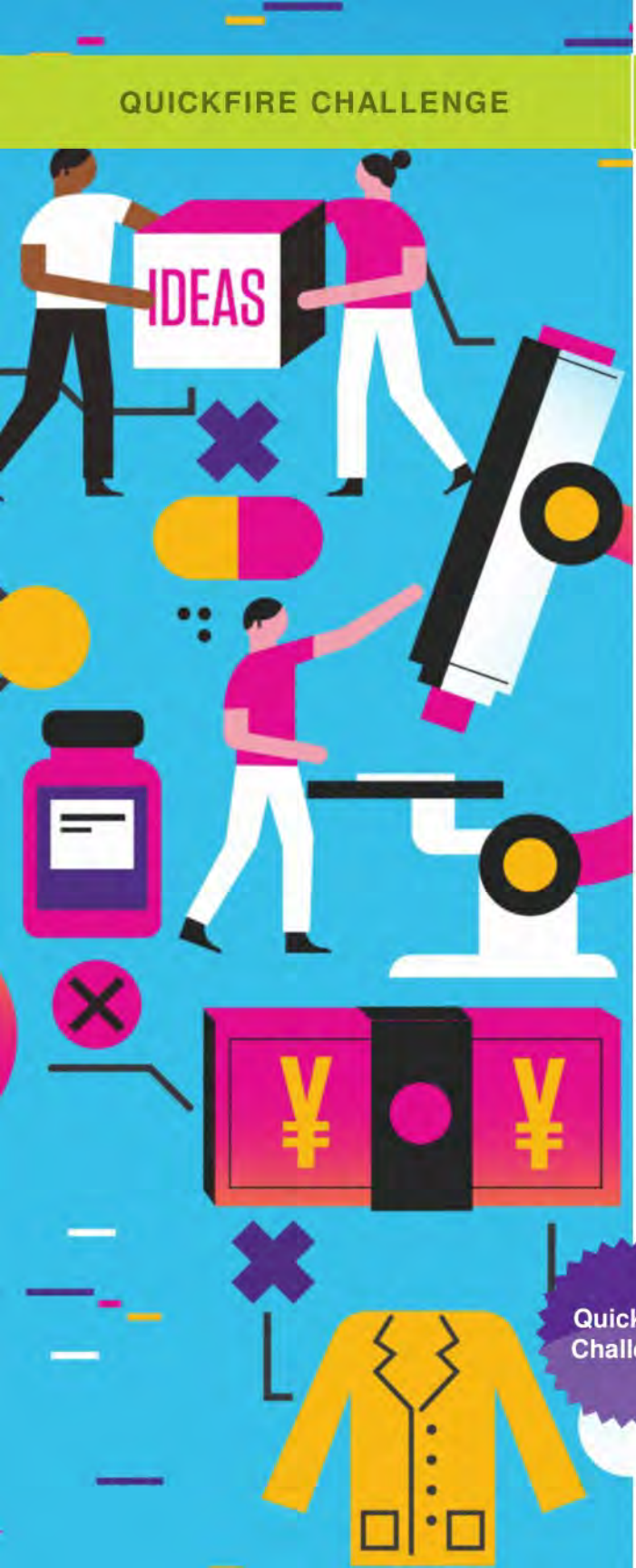
MISSION STATEMENT:

NeuroTheryX is an R&D-driven development stage drug discovery company focusing on CNS diseases. NeuroTheryX utilizes a discovery platform defined by highly predictive and efficient biology-driven models with a focused and prioritized chemistry approach. NeuroTheryX has extensive biological disease models that can be screened with both small molecules as well as biological extracts. The NeuroTheryX lead drug is a small molecule therapeutic for the treatment of progressive multiple sclerosis. NeuroTheryX also has interest in the area of neuropsychiatric disorders such as bipolar disorder

PROBLEM:

NeurotheryX is bringing a novel biological approach to drug discovery which has been neglected. Specifically, NeurotheryX focuses on CNS diseases. Our main project addresses the un-met need for therapeutics aimed at myelin repair in demyelinating conditions.

SOLUTION:

A unique biology driven technology platform combined with focused chemistry allows NeurotheryX to generate powerful intellectual property protected new chemical entity therapeutics that have been extensively de-risked.

Neurotrack

Neurotrack

PRIMARY SECTOR/TA/INDICATION:	Consumer | Health Tech | Sensors
SECONDARY SECTOR/TA/INDICATION:	Pharmaceuticals | Neuroscience | Alzheimer's Disease
RESIDENT STATUS LOCATION:	Virtual
RESIDENT STATUS:	Current
R&D STAGE:	Pre Revenue/Commercial

KEY DIFFERENTIATION:

At Neurotrack, our neuroscientists, neuropsychologists and engineers have developed the Imprint Memory Assessment based on breakthrough research. Taken online, the assessment offers advanced eye tracking technology in the comfort and privacy of an individuals own home and allows recurring assessment to show and predict decline over time.

QuickFire Challenge

MISSION STATEMENT:

Silicon-Valley-based Neurotrack, led by Elli Kaplan, CEO, is on a mission to transform the diagnosis and prevention of memory loss and related diseases like Alzheimer's.

PROBLEM:

Alzheimer's disease is the greatest healthcare challenge of our generation. Its insidious and debilitating nature takes an enormous toll on the quality of life of those who suffer from the disease as well as their family members and caretakers.

SOLUTION:

Neurotrack is commercializing the first fully integrated digital platform for assessing and preventing cognitive decline and Alzheimer's disease. Neurotrack's digital therapeutic is validated to delay Alzheimer's and improve cognition. The companion Imprint 30-min assessment can assess an individual's risk for cognitive decline and the 5-minute Imprint Monitor is used to engage and monitor patients while on the digital therapeutic. The platform is available on desktop and mobile.

Pentavere Research Group

www.pentavere.com

PRIMARY SECTOR/TA/INDICATION:	Consumer | Health Tech | Data Mining
RESIDENT STATUS LOCATION:	Toronto
RESIDENT STATUS:	Current
R&D STAGE:	Various

KEY DIFFERENTIATION:

Company has demonstrated that their tool can take unstructured data and turn it into structured data.

MISSION STATEMENT:

To improve health outcomes by uncovering knowledge hidden within unstructured health data.

PROBLEM:

Despite drowning in data, 80% of the health information we create is still buried in clinical narrative documentation. Today the only way to aggregate and extract real world evidence from these unstructured clinical sources is by manual chart abstraction which is time consuming, cost prohibitive, and does not scale.

The result is that critical information is lost, innovative projects go un-started and medical error death rates continue to increase despite the technological advances in medical treatment.

SOLUTION:

Pentavere has developed technology, clinically validated, which transforms unstructured clinical narrative sources into high quality "row and column" data sets in a fraction of the time and with more precision than manual chart abstraction. These data sets are then used for diagnosis analytics, predictive applications, and precision medicine. The value of delivering datasets that provide truly meaningful insights without having to incur the costs, time delays, and inaccuracies of manual abstraction is significant in reducing the inadequate medical information problem that continues to be a leading cause of death in North America.

Redpin Therapeutics

REDPIN
therapeutics

PRIMARY SECTOR/TA/INDICATION:	Pharmaceuticals	Neuroscience	Parkinson's Disease
RESIDENT STATUS LOCATION:	NYC
RESIDENT STATUS:	Current
R&D STAGE:	Preclinical (GLP Tox-IND)

KEY DIFFERENTIATION:

Redpin has two mechanisms to activate the modified receptors which would enable therapeutic benefit, no other company has access to this technology. The technology can be applied to various disease states.

MISSION STATEMENT:

RedPin seeks to develop and commercialize two novel and complementary platform technologies that enable the non-invasive regulation of cell activity using engineered receptors that are controlled by one of two methods: an FDA-approved drug (chemogenetics) or a magnetic field (magnetogenetics). We aim to treat both neurological and psychiatric disorders that do not respond to current therapies.

PROBLEM:

Today's drugs that modulate cell activity usually do so by systemic drug adminitration that leads to pharmacological effects across multiple regions and cell types. This untargeted approach may be associated with side effects that may limit efficacy.

SOLUTION:

Our chemogenetic and magnetogenetic technologies turn drug development on its head. Instead of the costly and slow traditional approach, which painstakingly develops a different drug for each receptor associated with a particular disease, Redpin has a scalable, generalizable solution that is applicable to many different diseases. We have developed engineered receptors that can be activated by a safe, potent, FDA-approved drug or magnetic fields to obtain pharmacological control over any cell type. Using different engineered receptors, the activated response can be either inhibitory or stimulatory to individual cells or neuronal circuits. The power of this unique technology is that it can be used to treat currently intractable disorders in disparate areas of medicine by targeting specific cells responsible for disease states in neurology, psychiatry, metabolism, and cancer.

Tiatros Inc.

TIATROS

www.tiatros.com

PRIMARY SECTOR/TA/INDICATION:	Consumer | Health Tech | Digital Therapeutics
RESIDENT STATUS LOCATION:	MBC SF
RESIDENT STATUS:	Alumni
R&D STAGE:	Pre Revenue/Commercial

KEY DIFFERENTIATION:

Tiatros has tested their digital health program in collaboration with the VA on soldiers with PTSD.

MISSION STATEMENT:

Tiatros provides resilience skills training programs and analytic tools that enable Human Resources and Employee Benefit groups to actively manage the productivity, mental health and psychological resilience of their workforce.

PROBLEM:

Large self-insured employers increasingly understand that underspending on mental health results in overspending on physical health. They understand that the key to lowering their corporate healthcare costs is to provide access to effective mental health care. They need affordable, evidenced-based behavioral health and psychological resilience skills services that result in quantitatively measurable improvements to the overall health, productivity and psychological resilience of their entire workforce.

Employers must be part of the solution to this problem, because they bear much of its cost. Collectively, employers lose $200 billion dollars in productivity each year due to untreated mental illness, while spending another $200 billion dollars to treat anxiety and depression in the workforce. That said, lost productivity costs and the direct cost of mental health care are just the tip of the proverbial iceberg for self-insured employers. The largest and most difficult-to-quantify part of their corporate healthcare budgets is spent indirectly on mental illness, i.e., hundreds of billions of dollars of healthcare spending on gastrointestinal illnesses, musculoskeletal illnesses, insomnia, pre-diabetic conditions, heart disease, substance abuse, migraine, and other chronic illnesses that are greatly exacerbated by untreated co-occurring mental illness.

SOLUTION:

Tiatros programs consist of 8 weekly sessions that each take approximately 90 minutes to complete. 12 – 16 participants who have similar health challenges and personal goals form a 'peer group'. Each peer group is moderated by a trained facilitator and overseen by an expert CBT therapist. Participants access their programs asynchronously, from anywhere, on their personal devices, when it is most convenient.

Participants learn and practice CBT skills with the other members of their peer group. We teach evidence-based CBT exercises, including Narrative Therapy and storytelling, journaling, and mindful meditation, that are carefully tailored to resonate with participants. We use social media-styled methods to foster a supportive and nurturing community that is itself therapeutic, acting to encourage every participant to actively engage in and complete his/her program. This approach greatly increases the number of therapeutic touch points, with most participants engaging daily, and some several times per day, so Tiatros achieves 75% program completion rates and clinical outcomes that are as good those seen in psychotherapies conducted by expert psychiatrists at top medical centers.

Tiatros integrates natural language analytics to personalize the user experience and sustain high levels of engagement; improve clinical outcomes; and provide the tools that our customers need to make data driven decisions to manage their budgets to optimize the health and psychological resilience of their workforce.

Winterlight labs

www.winterlightlabs.com

PRIMARY SECTOR/TA/INDICATION:	Pharmaceuticals | Neuroscience | Alzheimer's Disease
SECONDARY SECTOR/TA/INDICATION:	Pharmaceuticals | Health Tech
RESIDENT STATUS LOCATION:	Toronto
RESIDENT STATUS:	Current
R&D STAGE:	Discovery (Research, TI/TV)

KEY DIFFERENTIATION:

Algorithm has demonstrated potential to identify AD from clinical trial data.

MISSION STATEMENT:

To detect and diagnose cognitive and mental health conditions through speech and language using artificial intelligence.

PROBLEM:

Currently neuropsychology assessments are:

1. Time consuming & expensive
2. Subjective
3. Stressful
4. Can't be done often

SOLUTION:

We're the only company that uses speech and language to computationally detect cognitive impairment.

WINTERLIGHT

Johnson&Johnson INNOVATION | JLABS

JLABS Women's & Maternal Health Focused Companies

Aggamin

Aggamin

www.aggamin.com

PRIMARY SECTOR/TA/INDICATION:	Pharmaceuticals	Women's Health
RESIDENT STATUS LOCATION:	NYC
RESIDENT STATUS:	Current
R&D STAGE:	Discovery (Research, TI/TV)

KEY DIFFERENTIATION:

Aggamin is exclusively focused on addressing preeclampsia, a women's health issue. The company developed a preeclampsia diagnostic test marketed in the EU and Asia, is in Ph II clinical trials with a medical device therapy and is developing a biologic drug to reverse and prevent preeclampsia

MISSION STATEMENT:

To commercialize therapies for women's health indications.

PROBLEM:

Unmet medical needs for women's health.

SOLUTION:

Issued IP for validated pathways. Company founders successfully commercialized diagnostic for indication creating market for therapy.

Antiva Biosciences

PRIMARY SECTOR/TA/INDICATION:	Pharmaceuticals	Infectious Diseases
RESIDENT STATUS LOCATION:	San Diego
RESIDENT STATUS:	Alumni
R&D STAGE:	Lead (H2L-LO)

KEY DIFFERENTIATION:

Intheon is pioneering the world's first neurotechnology middleware platform, powering transformative applications that connect to your mind and body – anytime.

MISSION STATEMENT:

Lead product is a topical antiviral for the treatment of high-risk strains of human papillomavirus (HPV) infections, the primary cause of cervical cancer.

PROBLEM:

Cervical cancer incidence in the US is approximately 12,000, of which 99% is attributable to HPV. HPV-associated cancers are a major global health problem, with 500,000 new cases of cervical cancer annually. While cervical neoplasias and cancer are the most well-known HPV-related conditions, HPV is also a major cause of anal neoplasias and anal cancer, oropharyngeal neoplasias that cause head and neck cancer, genital warts, and respiratory papillomatosis. The advent of the prophylactic vaccine for HPV 16/18 in 2006 was a major step forward in the fight against HPV-associated cancers. However, the prophylactic vaccines do not cover all oncogenic HPV subtypes and adoption rates have been disappointing, particularly in the US and EU. Therefore, HPV infections and the disease states driven by such infections remain a major clinically unmet need.

SOLUTION:

Antiva Biosciences's lead drug program is aimed at intervening before intraepithelial lesions in the cervix and anus become cancerous. ABI-1968 is a double prodrug of an acyclic nucleoside phosphonate with known potent anti-viral activity but poor cellular permeability and use-limiting systemic toxicity. When administered topically or locally, ABI-1968 provides rapid uptake into cells and slow release of the active metabolite, thereby overcoming the challenges of the parent compound. ABI-1968 works by directly blocking HPV replication and inducing apoptosis in HPV-infected lesions, while sparing normal cells. A Phase 1a study was completed mid-2017. ABI-1968 is currently being studied in two Phase 1b clinical studies: one in CIN 2,3 patients and another in AIN 2,3 patients.

Bloomlife

www.bloomlife.com

PRIMARY SECTOR/TA/INDICATION:	Consumer | Women's Health
SECONDARY SECTOR/TA/INDICATION:	Consumer | Wellbeing and Health | Baby Care
RESIDENT STATUS LOCATION:	Virtual
RESIDENT STATUS:	Current
R&D STAGE:	Full Clinical and Product Development

MISSION STATEMENT:

Bloomlife combines prenatal wearables with data analytics to reassure and empower moms and help doctors earlier predict and manage pregnancy complications to improve birth outcomes.

PROBLEM:

There remain many unknowns in pregnancy. Unknowns that create stress, fear, and anxiety for moms, and unknowns that lead to complications and health risk for mom and baby (20% experience pregnancy complications, 1 in 8 babies born preterm). Over the past several decades there has been an increasing rate of high risk pregnancies and pregnancy complications due to maternal age, chronic disease, and lifestyle factors. At the same time access to care is increasingly an obstacle with 50% of US counties lacking a single OBGYN. Despite spending $100B annually on pregnancy and childbirth, the US ranks last in birth outcomes.

SOLUTION:

Bloomlife is pioneering the future of prenatal care by designing mom-centered, personalized health solutions that embrace each mom's unique journey and experience. We combine clinical grade prenatal wearables with data analytics. Our prenatal wearable is a small patch worn on mom's belly that non-invasively tracks important health parameters of mom and baby (maternal heart rate, stress, sleep, uterine activity + fetal heart rate + fetal movement). We can further capture self-reported (age, weight, mental health, drug/alcohol use) and environmental factors via the smartphone. Our analytics backend uses machine learning algorithms to identify modifiable risk factors for pregnancy complications and predict events (e.g preterm birth). Information is served to mom via a smartphone app where we deliver the right information, to the right mom, at the right time. With better information tailored to her, we take the guesswork out of pregnancy for mom to educate, reassure, and empower healthy decisions during this life changing period.

CallMidwife.com

CallMidwife.com

PRIMARY SECTOR/TA/INDICATION:	Consumer	Wellbeing and Health	Baby Care
RESIDENT STATUS LOCATION:	Virtual
RESIDENT STATUS:	Current
R&D STAGE:	Full Clinical and Product Development

MISSION STATEMENT:

Developed a web-based and mobile app for pregnant women and parents that enables parents to monitor their pregnancy, diagnose various complaints and access home. treatment guidelines.

PROBLEM:

Pregnant mothers and new parents often need immediate advice, emotional support or consultation for numerous and varied questions related to pregnancy and newborns. Easy access to such information can help prevent and solve problems related to women's and children's health and well-being, as well as support the health system.

SOLUTION:

CallMidwife.com is a web-based and mobile app for pregnant women and parents that uses evidence-based algorithms created by medical experts which enables parents to monitor their pregnancy, diagnose various complaints and access home treatment guidelines. In addition, CallMidwife.com offers 24/7 midwife consultation services via video, phone and live chat and can provide emotional support or advice on how to cope with any issues that may occur with a newborn baby.

Control Panel, Inc. (aka Droplet)

Control Panel

https://control-panel.io/

PRIMARY SECTOR/TA/INDICATION:	Medical Devices | Diagnostics
SECONDARY SECTOR/TA/INDICATION:	Medical Devices | Diagnostics | Women's Health
RESIDENT STATUS LOCATION:	Bay Area – MBC SF
RESIDENT STATUS:	Current
R&D STAGE:	Early Technical Feasibility and Prototyping

MISSION STATEMENT:

Our general company mission is "Wellness for every woman."

PROBLEM:

Routine diagnostics require women to sacrifice time, money, and privacy.

SOLUTION:

We're making diagnostic tests for women more convenient than ever before by combining state-of-the-art diagnostics with best-in-class logistics to make at-home tests focused on female health both feasible and affordable.

iSono Health

www.isonohealth.com

PRIMARY SECTOR/TA/INDICATION:	Medical Devices
SECONDARY SECTOR/TA/INDICATION:	Health IT
RESIDENT STATUS LOCATION:	Virtual
RESIDENT STATUS:	Current
R&D STAGE:	Early Technical Feasibility and Prototyping

MISSION STATEMENT:

iSono Health is transforming breast cancer screening by combining artificial intelligence (AI) and automated ultrasound to empower women and physicians with accessible and personalized breast health monitoring.

PROBLEM:

Every year 1.7 million women get diagnosed with breast cancer and 1.5 billion women need breast cancer screening. Mammogram as a screening tool has significant shortcomings: 1) insufficient access 2) x-ray radiation; 3) deficient sensitivity in dense breast tissue affecting more than 47% of women in US/Europe and 70% of women in Asia. As a result, 39% of breast cancers are discovered after spreading beyond local tissue, which highlights the pressing need for more accessible detection of cancers at earlier stages, when treatment is most effective and costs 10x less compared to late stage. Ultrasound is a scalable and highly sensitive technology proven to identify tumors at earlier stages. However, the adoption of ultrasound as been limited due to variability of scans and interpretation based on the operator skill resulting in false positives, lengthy exam time (15-30mins), and shortage of ultrasound specialists. Automated breast ultrasound (ABUS) systems improve on limitations of hand-held ultrasound, however, adoption and accessibility of ABUS has been limited, especially in point-of-care settings, due to high capital cost, and large equipment size.

SOLUTION:

Our platform combines compact, automated ultrasound with AI. Our patented ultrasound scanner automatically captures 3D images of whole breast in 1min. The scanner attaches to a bra-like accessory, communicates with a smart device, and data is transferred to a secure cloud for storage and deep learning. Our deep learning algorithm identifies abnormal masses and tracks changes in breast tissue using acoustic biomarkers extracted from quantitative ultrasound data. Unlike other imaging modalities, our system captures breast in its natural shape, produces repeatable images independent of operator skill in 1 minute without the need for expensive capital equipment, radiation, and patient discomfort.

Mercy BioAnalytics, Inc.

MERCY
BIOANALYTICS

www.mercybio.com

PRIMARY SECTOR/TA/INDICATION:	Pharmaceuticals	Diagnostics
RESIDENT STATUS LOCATION:	Boston - LabCentral
RESIDENT STATUS:	Current
R&D STAGE:	Discovery (Research, TI/TV)

KEY DIFFERENTIATION:

We are developing plasma-based assays that promise significantly greater sensitivity and specificity for stage I cancer than competing approaches, including those using cell-free nucleic acids, circulating tumor cells, and proteomics.

MISSION STATEMENT:

Mercy BioAnalytics (MBA) is dedicated to developing liquid biopsy to detect cancer at stage I, when it is more likely to be cured, and improve the efficiency of clinical trials.

PROBLEM:

Every year 600,000 Americans die of cancer. The mortality and morbidity of cancer could be greatly reduced by detecting cancer early; early cancer detection improves survival four to ten times across cancer types. For example, the five-year survival rate of ovarian cancer is 92% and 14% for stage I and IV disease, respectively. Despite the large difference in survival, only 15% of women are diagnosed with stage I ovarian cancer. Many patients continue to be diagnosed with late-stage cancer because of the lack of an effective screening test. Secondly, the FDA is putting pressure on pharmaceutical companies to incorporate biomarkers into their oncology clinical trial strategies to more precisely find patients likely to respond. The motivation for increased precision is driven by the low average response rate for oncology treatments, currently at 24%, meaning 3 out of 4 patients will not benefit from receiving a prescribed oncology drug. Many of the world's top pharma companies are now looking for biomarkers that will predict drug sensitivity, drug efficacy, or disease progression. Moreover, biomarkers used to stratify patients in clinical trials from 2010 to 2017 have increased the chance the drug is FDA approved by three times. Given the advantages of biomarkers, Dr. Pascal Soriot, the CEO of AstraZeneca, has mandated in 2015 that every new therapeutic asset under development at the company have an associated biomarker.

SOLUTION:

Mercy BioAnalytics' (MBA) solution is highly interdisciplinary, utilizing new techniques from data science (machine learning), bioengineering (microfluidics), and targeted sequencing. We are identifying biomarkers and developing a novel form of liquid biopsy diagnostic. Our computational platform has identified several unique cancer biomarkers with much higher sensitivity and specificity for early-stage cancers than FDA approved and competing platforms. FDA approved approaches to cancer screening include medical procedures, protein biomarkers, and medical imaging. Medical procedures are impractical for screening on a large scale due to invasiveness and infrastructure needs. Protein biomarkers, such as prostate specific antigen, have a high-false positive rate, leading to over-diagnosis. Medical imaging exposes patients to radiation and is often not applicable to all patients; mammograms, for example, are less sensitive and specific for women with dense breasts. Our approach would conversely require light infrastructure and be highly sensitive and specific, universally applicable to all patients, and non-invasive. Unlike companies pursuing similar goals, including Grail, Foundation Medicine, Guardant Health, and Personal Genome Diagnostics, our instrumentation is designed to survey certain classes of biomolecules that have not been previously examined by these companies. As such, we may uniquely detect cancers that are less than 1 cm3, identify the cancer's tissue of origin, and pick-up on drug sensitivity or resistance markers earlier.

(19-08160-F) - 001218

Johnson&Johnson INNOVATION | JLABS

JLABS Telemedicine Focused Companies

(19-08160-F) - 001219

PRIMARY SECTOR/TA/INDICATION:	Medical Devices | Health Tech
SECONDARY SECTOR/TA/INDICATION:	Pharmaceuticals | Neuroscience | Schizophrenia
RESIDENT STATUS LOCATION:	Toronto
RESIDENT STATUS:	Current
R&D STAGE:	Pre-Clinical / Early Mechanical

KEY DIFFERENTIATION:

Digital platform that allows for real time assessment of cognitive function in psychiatric disorders.

MISSION STATEMENT:

A Joint Venture between CAMH and MEMOTEXT, A4i aims to solve many of the current problems across the schizophrenia healthcare continuum. An evidence-based, peer-to-peer patient centric mobile app and provider portal, A4i enhances both illness self-management and provider engagement to better support recovery, medication adherence and community functioning while predicting and attempting to reduce relapse risk for people living with schizophrenia and psychosis.

PROBLEM:

Schizophrenia occupies 1 out of 12 hospital beds in Canada, costing $6.85B annually in healthcare costs and effective services are hampered by several complex, compounding factors. Currently there are no commercially available and/or clinically proven digital or mobile health offerings that provide a solution to improve medication adherence in patients with schizophrenia. With a 70% mobile tech adoption among patients, A4i is a response to the gaps in the current system of care for individuals with schizophrenia-spectrum illnesses.

SOLUTION:

Our technology is unique in that it is designed with clinical expertise of a leading mental health institution and the expertise of a digital health commercialization innovation team. Behind this team is a robust and proprietary technology with clinically specific IP and significant market access both through commercial and clinical collaborative opportunities. The IP will relate to the clinical decision rules used by the system to determine content distribution and interpretation of ambient and subjective health data. A4i combines multiple frameworks (social activation, stress, anxiety, motivation and cognition) to dynamically engage, collect data, tailor and deliver (anonymized) peer-to-peer and evidence-based content. A4i uses interactions, usage and ambient sleep monitoring, pioneering the use of machine learning and hypothesis-driven content feed and data analysis to combine subjective and objective data elements to segment intervention content in real-time. These key functions of A4i are tailored to the specific needs and preferences of individual users. They were developed from a rigorous process of iterative and incremental development that involved reviews of the academic literature and building from proven e-health strategies. Most importantly, active participation of end-users and key stakeholders engaged as advisors throughout the course of iterative testing. The system which will be accessible both with smart (iOS/Android) and feature (non-smart/flip phones) will be unique in its ability to adapt the intervention to the specific needs and behaviors of the patient/user.

HealthBeacon

http://healthbeacon.com/

PRIMARY SECTOR/TA/INDICATION:	Consumer | Health Tech | Health & Healing
RESIDENT STATUS LOCATION:	Virtual
RESIDENT STATUS:	Current
R&D STAGE:	Full Clinical and Product Development

KEY DIFFERENTIATION:

Tiatros has tested their digital health program in collaboration with the VA on soldiers with PTSD.

MISSION STATEMENT:

HealthBeacon is a medication adherence technology company that develops smart tools for managing medication.

PROBLEM:

Poor medical adherence has been estimated to be a $290 billion issue annually by the New England Health Institute. They estimate that 2 billion cases of non-adherence are avoidable. Clinical studies have demonstrated that only 50%-70% of patients adhere properly to prescribed drug therapy. Smart connected devices have demonstrated an ability to improve adherence by as much as 27%. (Partners Centre for Connected Health 2010).

SOLUTION:

HealthBeacon has developed an FDA cleared, smarts sharps system that is able to track whether a patient has taken their medication and help them stay adherent to their prescription schedule. This system has been clinically reviewed, validated by the pharmaceutical industry and has been integrated into patient care programs throughout North America and Europe, delivering valuable data to both the patient and their clinical team.

Holmusk

holmusk

PRIMARY SECTOR/TA/INDICATION:	Pharmaceuticals | Neuroscience | Data analysis
SECONDARY SECTOR/TA/INDICATION:	Pharmaceuticals | Health Tech
RESIDENT STATUS LOCATION:	NYC
RESIDENT STATUS:	Current
R&D STAGE:	Discovery (Research, TI/TV)

KEY DIFFERENTIATION:

End to end collation of mental health data between patients and physicians enabling a holistic view of the patient experience enabling better clinical decision making.

MISSION STATEMENT:

To use technology to enhance data-enabled, human-driven healthcare and improve the lives of people with chronic and behavioural health.

PROBLEM:

Behavioral health patients are underserved. Solutions to behavioral health, mental health and neuropsychiatric diseases are limited, with the practice of clinical care and the rate of investment in research and development of new drug treatments unable to keep up with the intensity of the problem.

SOLUTION:

Holmusk, through the capture, organizing and analytics of patient behavioral health data, is building a next generation behavioral health platform to enable the delivery of quality care for patients suffering from mental health disorders. This platform incorporates a behavioral health specific electronic health record system (MindLinc 2.0), combined with a digital health platform (HealthLinc) gathering digital phenotype data outside of clinician visits to create the largest longitudinal real-world behavioural health database (Holmusk Database). Holmusk's proprietary algorithms (Holmusk Analytics) stitch together these two types of data, processing & translating them into a continuous disease trajectory for individual patients. This brings an unprecedented understanding of patient mental health, allowing pharma companies, clinicians and researchers to investigate needs of patients and design new therapeutics, drugs and interventions which can be tested readily on a network of community mental health clinics.

ICmed

ICmed™

PRIMARY SECTOR/TA/INDICATION:	Pharmaceuticals | Health Tech
RESIDENT STATUS LOCATION:	Boston
RESIDENT STATUS:	Current
R&D STAGE:	Marketed Products

KEY DIFFERENTIATION:

Enables integration of various data sources for use by patients and caregivers and can be utilized by external stakeholders such as payors and providers.

MISSION STATEMENT:

To use technology to enhance data-enabled, human-driven healthcare and improve the lives of people with chronic and behavioral health.

PROBLEM:

Value-based models of care require sustained patient engagement, adherence to care plans, coordination among diverse provider care teams, free exchange of relevant data in real time, and unburdened caregiver support. Otherwise, quality outcomes and patients are at risk, providers stand to lose income, and caregivers' role is compromised. Traditional Electronic Medical Record platforms, built for health systems and payers to organize patient data in technical jargon to capture and facilitate reimbursement, are NOT a consumer tool and cannot be adapted as such.

SOLUTION:

ICmed is a patient- and caregiver-centered communication and collaboration mobile software solution allowing the patient-caregiver dyad to work as a team, in coordination with their provider care staff. Users OWN, SHARE and LEARN from their health care provider staff (nurse, PA, case worker) and their health profile, medical conditions and collected data in a safe, secure environment. The provider care team works in collaboration with the patient-caregiver dyad through their enterprise dashboard, tailored to their workflow and synchronized with the mobile app. Imperative: None of our tech development or workflow design is undertaken without the informal (usually family) caregiver in mind. This is unique. Limited but compelling research indicates that medical outcomes and preventative health are both improved with the inclusion of an informal (usually family) caregiver in the plan. The ICmed business model addresses a consumer imperative to not only access one's health data, but also allow caregivers to empathize and support. Both patients and caregivers learn how to manage health independently and take direction from providers, all on a fluid communication platform. The extent of caregiver involvement in our solutions is a key differentiating competitive factor.

LIGHTHOUSE

https://lighthouse247.com

PRIMARY SECTOR/TA/INDICATION:	Consumer | Health Tech | Virtual/Augmented Reality
RESIDENT STATUS LOCATION:	Virtual
RESIDENT STATUS:	Current
R&D STAGE:	Pre-Revenue/Commercial

MISSION STATEMENT:

LIGHTHOUSE uses the power of voice (e.g., Alexa) to translate doctor-prescribed health journeys into accelerated patient action.

PROBLEM:

PATIENT: Heart wrenching numbers related to patient adherence, lifestyle change and logging. Digital programs or "digital therapeutics" have made limited evolution beyond simple reminders, check lists or log books. Tech phobia, language preference and patient literacy levels reduce the impact of many digital programs.

PHARMA: Outcomes-based healthcare remains an industry trend on every pharma company's ten-year plan. It is not inconceivable to follow the path of IBM, who over the course of a decade changed their revenue mix from 80% hardware/20% services to the inverse. "How?" remains the big open question.

SOLUTION:

Voice based patient programs. LIGHTHOUSE puts your doctor's care plan on your kitchen table, available with the simple phrase "Alexa, check in with LIGHTHOUSE".

- LIGHTHOUSE connects directly into a physician's EMR and translates care plans, discharge protocols or care priorities into bite-sized patient programs
- We use sophisticated patient behavior models to build core skills in diet, physical activity, taking your meds and writing stuff down
- A voice-based program triggers significantly less tech-phobia (everyone talks), multiple language support and improved health literacy
- The "magic" is in the way that LIGHTHOUSE constructs patient conversations to build patient relationships, meet patients at "their" commitment level and translate care plans into daily actions – all to drive better patient outcomes.

MyInfo, LLC (dba MyHealth.us)

www.myhealth.us

PRIMARY SECTOR/TA/INDICATION:	Consumer	Health IT	Mobility/Wearables
RESIDENT STATUS LOCATION:	NYC
RESIDENT STATUS:	Current
R&D STAGE:	Various

KEY DIFFERENTIATION:

MyHealth.Us is the largest source for consumers to collect their medical and Medicare records, track healthcare observations, and find better consumer-facing solutions online and via 24/7 call center for emergency treatment and diagnostic assistance. Its combined patent-pending patient engagement and service delivery model reduces claims, errors and time to treatment, and improves outcomes. It is very low cost, easy to use, secure, comprehensive, and used by four labor unions and one insurer - and growing.

MISSION STATEMENT:

Consumer-facing agnostic healthcare platform to help people get and stay well quickly, affordably, with fewer errors, more preventive and predictive care by using innovative care solutions and behavioral inputs for lasting benefits.

PROBLEM:

Lack of data (difficultly accessing and sharing of medical records, lack of patient engagement, failure to record patient/family/caregiver observations). Limited access to innovative solutions with sufficient data for predictive and preventive care. Rudimentary care delivery solutions.

SOLUTION:

Sell MyHealth LifeCode ID and 24/7 service to businesses, insurers and communities to provide free to individuals and family who track their information in response to emails, text and other encouragements, and then receive assistance and online access to broad range of innovative affordable solutions. Unique is our building of expertise in patient engagement and solution delivery. Patent files for storing medical records and observations together with common ID.

(19-08160-F) - 001225

Mymee

mymee
know myself

PRIMARY SECTOR/TA/INDICATION:	Pharmaceuticals | Immunology | Digital Health
RESIDENT STATUS LOCATION:	NYC
RESIDENT STATUS:	Current

KEY DIFFERENTIATION:

Novel method for analyzing patient parameters with nutritional input to understand response to stimuli and potentially reduce pharma therapy burden.
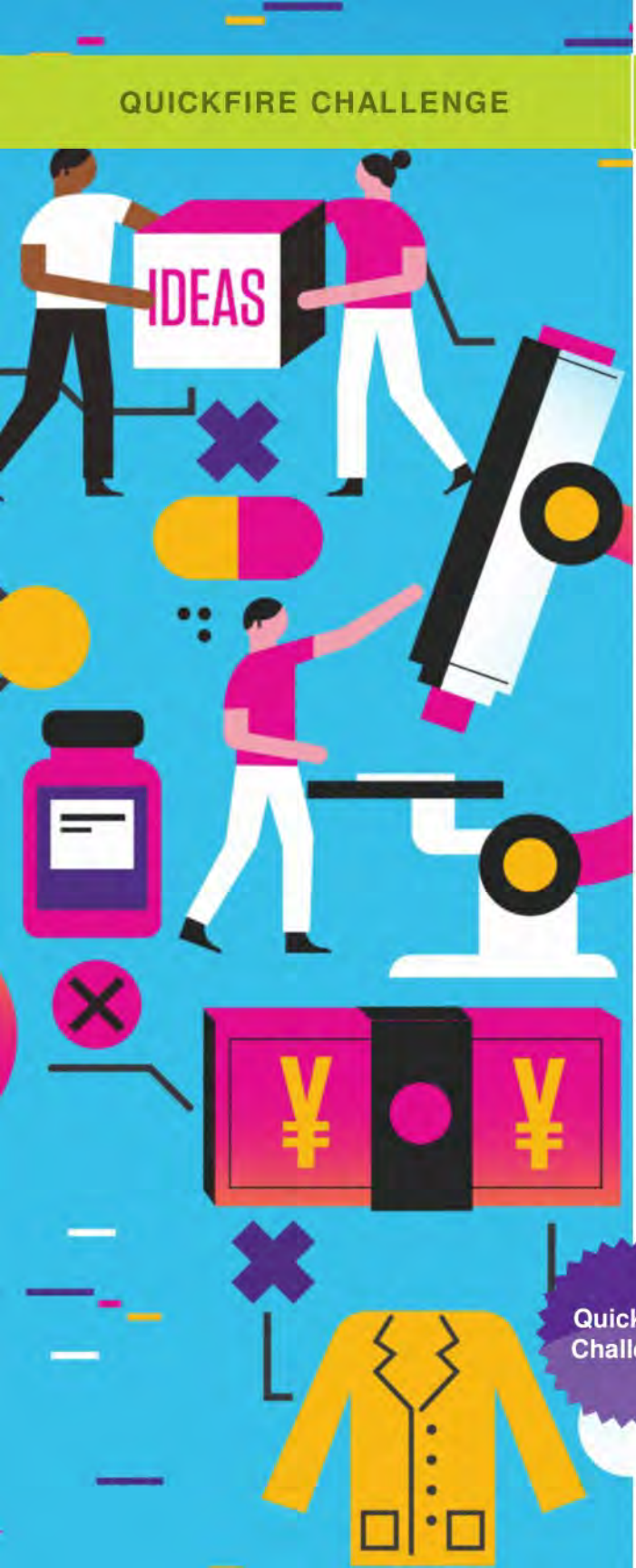
MISSION STATEMENT:

Everybody is different, your treatment should be too. Our mission is to bring precision medicine to the masses, improving outcomes while reducing cost. We are starting by fixing chronic autoimmune disease while working to validate the intervention as a cost saving tool because it reduces the number of drugs and surgeries that patients need. We want to work with insurers and self-insured employers in shared savings contracts and provide our intervention to the patients for free.

PROBLEM:

There are 24 million Americans who suffer from at least one autoimmune disease, a $136B problem while another 100 million have elevated ANA (pre-autoimmune disease), making it the second largest pop health problem facing our country. The current standard of care for autoimmune disease patients usually involves putting patients on steroids and immunosuppressant drugs, or getting surgeries. Unfortunately, these drugs are expensive and lead to debilitating side effects, including organ failure and death. There are 157 different autoimmune diseases and most are rare, so this costly population has been largely ignored. We solve the problem underlying all of them - immune dysregulation which allows us to consolidate all these rare diseases into one massive problem worth solving.

SOLUTION:

Our Digital Therapeutics program reverses the symptoms of chronic autoimmune disease through data analytics and health coaching which reduces or eliminates the need for expensive specialty pharmacy drugs. In 16-weeks Mymee builds data models of each participant based on patient-generated health data. Week by week the coach customizes the app so that patients track an adaptive set of potential triggers against their symptoms. Machine learning allows us to collect the minimum viable data to help coaches identify the root cause of each patient's disease. They create behavioral change to mitigate or reverse symptoms, dramatically improving quality of life and decreasing cost of care.

Neurotrack

Neurotrack

PRIMARY SECTOR/TA/INDICATION:	Consumer | Health Tech | Sensors
SECONDARY SECTOR/TA/INDICATION:	Pharmaceuticals | Neuroscience | Alzheimer's Disease
RESIDENT STATUS LOCATION:	Virtual
RESIDENT STATUS:	Current
R&D STAGE:	Pre Revenue/Commercial

KEY DIFFERENTIATION:

At Neurotrack, our neuroscientists, neuropsychologists and engineers have developed the Imprint Memory Assessment based on breakthrough research. Taken online, the assessment offers advanced eye tracking technology in the comfort and privacy of an individuals own home and allows recurring assessment to show and predict decline over time.

QuickFire Challenge

MISSION STATEMENT:

Silicon-Valley-based Neurotrack, led by Elli Kaplan, CEO, is on a mission to transform the diagnosis and prevention of memory loss and related diseases like Alzheimer's.

PROBLEM:

Alzheimer's disease is the greatest healthcare challenge of our generation. Its insidious and debilitating nature takes an enormous toll on the quality of life of those who suffer from the disease as well as their family members and caretakers.

SOLUTION:

Neurotrack is commercializing the first fully integrated digital platform for assessing and preventing cognitive decline and Alzheimer's disease. Neurotrack's digital therapeutic is validated to delay Alzheimer's and improve cognition. The companion Imprint 30-min assessment can assess an individual's risk for cognitive decline and the 5-minute Imprint Monitor is used to engage and monitor patients while on the digital therapeutic. The platform is available on desktop and mobile.

www.questions.ai

PRIMARY SECTOR/TA/INDICATION:	Pharmaceuticals	Immunology| Rheumatoid Arthritis
RESIDENT STATUS LOCATION:	Beerse
RESIDENT STATUS:	Current
R&D STAGE:	Biomarkers

KEY DIFFERENTIATION:

Using so called Micro Moments to capture data from people in moments that are "free".

MISSION STATEMENT:

Developing the Q platform to improve patient engagement and capture more and more accurate data, by combining multiple data streams and multiple communication channels for large pharma and medical device companies.

PROBLEM:

Keeping patients engaged in medical therapy and clinical studies by interacting through micro moments. Collecting high quality data and combining data streams at lower cost for health care professionals.

SOLUTION:

We split complex interactions into micro-moment communications. We make the interactions personalized and hyper-relevant using a dynamic decision tree, that adapts the interaction with the patient to their situation. With less effort we get more data, more quickly, more reliably and of a better quality.

Savor Health

PRIMARY SECTOR/TA/INDICATION:	Pharmaceuticals	Health IT	Mobile Wellness
RESIDENT STATUS LOCATION:	NYC
RESIDENT STATUS:	Current

KEY DIFFERENTIATION:

1. Disease-specific approach to personalizing nutrition solutions leveraging evidence-base science, clinical best practices and unique patient data (as compared to a broader, more generalized approach to nutrition and nutrition intervention).

2. Multi-variable personalization algorithm, combined with unconstrained "solution set" (versus the 5-7 predetermined options/solutions offered by others in the market) results in dynamic, personalized and clinically appropriate recommendations for cancer patients who also have multiple co-morbid conditions, medications, side effects, and medical needs/issues that need to be "solved for" nutritionally in order to impact positive clinical outcome at lower total cost of care.

MISSION STATEMENT:

Savor Health's mission is to improve the lives of people with cancer by empowering them with safe, evidence-based and easily actionable solutions to their nutritional issues.

PROBLEM:

Savor Health is addressing the highly prevalent problem of malnutrition and nutrition-related side effects and symptoms experienced by cancer patients. Ultimately, we intend to leverage our technology solution in other chronic medical conditions where treating and managing nutritional issues has also been shown to improve outcomes. The nutritional issues of cancer patients have a negative impact on all stakeholders in the healthcare system - payors (including self-insured employers), providers and patients and, as a result, all stakeholders have an incentive to find solutions to address these issues. Evidence-based literature confirms that nutritional issues are prevalent in people with cancer and that up to 80% of patients experience them. Malnutrition is the #2 secondary diagnosis in cancer patients and 1/3 of all cancer deaths are due to severe malnutrition. HemOnc Today in June 2017 reported that severe malnutrition in cancer patients today is "almost epidemic." Malnourished patients experience greater treatment toxicity and are less adherent to drug therapy. Patients that are malnourished drive up healthcare costs as they experience a 54% higher rate of re-admission and a 4-6 day longer length of stay.

SOLUTION:

The Savor Health solution is an AI-based personalized nutrition care management and patient engagement technology platform designed to prevent and manage the nutritional issues of people with chronic medical conditions, initially cancer patients. Created by a team of oncology-credentialed medical professionals and data scientists, Savor Health's technology provides highly personalized, clinically appropriate nutrition recommendations based on evidence-based science, clinical best practices and unique patient data. Through its patent-pending chat bot, Savor Health engages with patients and caregivers and unique patient data is collected. Data is then analyzed and, based on a proprietary rules engine and expert coaching dialogues, actions and recommendations, patients are provided with appropriate nutrition-related advice and support. As patient treatments and needs change, Savor Health's recommendations are also adjusted. Feedback loops and machine learning enable greater personalization and, ultimately, prescriptive nutrition solutions. While initially focused in oncology for proof of concept, the technology will be replicated in other chronic medical conditions where proper nutrition has been shown to improve clinical and quality of life outcomes to reduce healthcare spending.

Tiatros Inc.

TIATROS

www.tiatros.com

PRIMARY SECTOR/TA/INDICATION:	Consumer	Health Tech	Digital Therapeutics
RESIDENT STATUS LOCATION:	MBC SF
RESIDENT STATUS:	Alumni
R&D STAGE:	Pre Revenue/Commercial

KEY DIFFERENTIATION:

Tiatros has tested their digital health program in collaboration with the VA on soldiers with PTSD.

MISSION STATEMENT:

Tiatros provides resilience skills training programs and analytic tools that enable Human Resources and Employee Benefit groups to actively manage the productivity, mental health and psychological resilience of their workforce.

PROBLEM:

Large self-insured employers increasingly understand that underspending on mental health results in overspending on physical health. They understand that the key to lowering their corporate healthcare costs is to provide access to effective mental health care. They need affordable, evidenced-based behavioral health and psychological resilience skills services that result in quantitatively measurable improvements to the overall health, productivity and psychological resilience of their entire workforce.

Employers must be part of the solution to this problem, because they bear much of its cost. Collectively, employers lose $200 billion dollars in productivity each year due to untreated mental illness, while spending another $200 billion dollars to treat anxiety and depression in the workforce. That said, lost productivity costs and the direct cost of mental health care are just the tip of the proverbial iceberg for self-insured employers. The largest and most difficult-to-quantify part of their corporate healthcare budgets is spent indirectly on mental illness, i.e., hundreds of billions of dollars of healthcare spending on gastrointestinal illnesses, musculoskeletal illnesses, insomnia, pre-diabetic conditions, heart disease, substance abuse, migraine, and other chronic illnesses that are greatly exacerbated by untreated co-occurring mental illness.

SOLUTION:

Tiatros programs consist of 8 weekly sessions that each take approximately 90 minutes to complete. 12 – 16 participants who have similar health challenges and personal goals form a 'peer group'. Each peer group is moderated by a trained facilitator and overseen by an expert CBT therapist. Participants access their programs asynchronously, from anywhere, on their personal devices, when it is most convenient.

Participants learn and practice CBT skills with the other members of their peer group. We teach evidence-based CBT exercises, including Narrative Therapy and storytelling, journaling, and mindful meditation, that are carefully tailored to resonate with participants. We use social media-styled methods to foster a supportive and nurturing community that is itself therapeutic, acting to encourage every participant to actively engage in and complete his/her program. This approach greatly increases the number of therapeutic touch points, with most participants engaging daily, and some several times per day, so Tiatros achieves 75% program completion rates and clinical outcomes that are as good those seen in psychotherapies conducted by expert psychiatrists at top medical centers.

Tiatros integrates natural language analytics to personalize the user experience and sustain high levels of engagement; improve clinical outcomes; and provide the tools that our customers need to make data driven decisions to manage their budgets to optimize the health and psychological resilience of their workforce.

telmedx

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http://www.telmedx.com/

PRIMARY SECTOR/TA/INDICATION:	Consumer	Health IT	Mobile Wellness
RESIDENT STATUS LOCATION:	Virtual
RESIDENT STATUS:	Alumni
R&D STAGE:	Full Clinical and Product Development

MISSION STATEMENT:

telmedx provides a mobile phone-based telemedicine platform that enables doctors, nurses and other caregivers to engage patients wherever they happen to be located and whenever they need to be seen via high-resolution live video and remote image capture.

PROBLEM:

The current model of caring for patients in person is unsustainable. While traditional videoconference systems are being used in telemedicine, they simply cannot deliver the resolution and clarity needed for doctors to remotely make clinical decisions with confidence.

SOLUTION:

The telmedx mobile telemedicine platform delivers high-resolution live video and photos over wireless networks, enabling doctors to deliver care remotely and confidently without the need for patients to visit medical facilities.

The telmedx platform provides superior clarity and resolution via a secure, HIPAA/HITECH and EU-compliant live medical-grade video feed from the digital cameras in the back of mobile phones and tablets, even in low bandwidth environments. WiFi and WiMax networks can also be used, as well as WiFi via satellite. The live video and audio continue while still images are captured, and the video can be started and stopped during an existing audio call, without interrupting that call. Multiple doctors in different locations can view the same video, and each can independently capture their own images, thereby making specialist consultations seamless. See www.telmedx.com/video for the platform in use. The telmedx platform delivers much higher quality voice and video than traditional Voice over Internet Protocol (VoIP) video conferencing systems.

Kaiser Permanente in Portland managed about 25 wound care and home health patients per month in 2013. Today, using the telmedx platform, KPNW has scaled to more than 3,200 wound care virtual consults per year. In 94% of the consults, the patient was treated at home and did not go to a brick-and-mortar medical facility.

uMedeor

www.umed.org

PRIMARY SECTOR/TA/INDICATION:	Pharmaceuticals	Health IT	Blockchain
RESIDENT STATUS LOCATION:	NYC
RESIDENT STATUS:	Current

KEY DIFFERENTIATION:

uMed uniquely allows research organizations to remotely engage patients and monitor outcomes in real-time across a network of sites.

Our competitors such as TriNetX are unable to support real-time engagement based on queries to their dataset, limiting value across the product lifecycle.

MISSION STATEMENT:

uMed aims to be the key enabler to precision research and individualized care by driving targeted access to patients and their health data.

PROBLEM:

It is not just clinicians who need to reach patients, and their health data; regional groups, payers, charities, academics and industry partners increasingly collaborate to drive targeted programs spanning direct care to cutting-edge research. However, there are many legal & ethical barriers that must be addressed to enable access, and as yet no satisfactory solution exists.

SOLUTION:

uMed combines technology with a unique legal approach to ensures patient's rights are respected whilst enabling 'at scale' access to patients and the health data. We consolidate pseudonymized data from healthcare provider partners, allowing validated 3rd party organizations to identify targeted patient cohorts. We then channel communications and consent requests through the patient's healthcare provider with the following benefits:

- Patients: Transparency over data sharing, increased access to research, and feedback on their contributions
- Healthcare Providers: Zero cost platform for internal risk stratification & engagement programs
- Research Orgs: Rapid access to patients and health data from targeted cohorts across our network; enabling precision campaigns in the pre & post market space, as well as access to longitudinal health data for RWE/RWD.

Veta Health

veta Health

https://www.myvetahealth.com/

PRIMARY SECTOR/TA/INDICATION:	Pharmaceuticals | Health IT | Mobile Wellness
RESIDENT STATUS LOCATION:	NYC
RESIDENT STATUS:	Current

KEY DIFFERENTIATION:

1. Disease-specific approach to personalizing nutrition solutions leveraging evidence-base science, clinical best practices and unique patient data (as compared to a broader, more generalized approach to nutrition and nutrition intervention).
2. Multi-variable personalization algorithm, combined with unconstrained "solution set" (versus the 5-7 predetermined options/solutions offered by others in the market) results in dynamic, personalized and clinically appropriate recommendations for cancer patients who also have multiple co-morbid conditions, medications, side effects, and medical needs/issues that need to be "solved for" nutritionally in order to impact positive clinical outcome at lower total cost of care.

MISSION STATEMENT:

Veta Health offers protocol-based care solutions using digital technologies. Our solutions accompany patients on their care journeys in non-traditional care settings to improve transparency and patient empowerment.

PROBLEM:

90% of the patient journey occurs beyond the reach of clinical teams and patients are often left to their own devices to interpret and act on their disease or condition. There is a lack of evidence-based medicine and clinically-driven patient support mechanisms, which leads to poor health outcomes and adherence.

SOLUTION:

The Veta Health platform utilizes a combination of patient tracking & support mechanisms from digital biomarkers to medication adherence to content and community support. Real-time patient tracking and automated patient management is married with advanced analytics to intelligently respond to patients in real-time. The flexible technology can be applied for automated care management and advanced risk scoring as well as a digital wrapper for drug therapies.

Winterlight labs

www.winterlightlabs.com

PRIMARY SECTOR/TA/INDICATION:	Pharmaceuticals | Neuroscience | Alzheimer's Disease
SECONDARY SECTOR/TA/INDICATION:	Pharmaceuticals | Health Tech
RESIDENT STATUS LOCATION:	Toronto
RESIDENT STATUS:	Current
R&D STAGE:	Discovery (Research, TI/TV)

KEY DIFFERENTIATION:

Algorithm has demonstrated potential to identify AD from clinical trial data.

MISSION STATEMENT:

To detect and diagnose cognitive and mental health conditions through speech and language using artificial intelligence.

PROBLEM:

Currently neuropsychology assessments are:

1. Time consuming & expensive
2. Subjective
3. Stressful
4. Can't be done often

SOLUTION:

We're the only company that uses speech and language to computationally detect cognitive impairment.